HM-181B

Wednesday May 2, 1990

Part VII

# Department of Transportation

Research and Special Programs Administration

49 CFR Parts 174, 175, and 177
Revision to Modal Regulations; Notice of Proposed Rulemaking

#### **DEPARTMENT OF TRANSPORTATION**

49 CFR Parts 174, 175, and 177

[Docket No. HM-181B, Notice No. 90-4]

RIN 2137-AB87

## **Revisions to Modal Regulations**

**AGENCY:** Research and Special Programs Administration (RSPA), Department of Transportation (DOT).

ACTION: Notice of proposed rulemaking.

**SUMMARY: RSPA** is proposing revisions to the carrier requirements in 49 CFR parts 174, 175, and 177 of the Hazardous Materials Regulations (HMR) for consistency with a previously published proposed rule, Docket HM-181, Notice 87-4 (52 FR 42772, November 6, 1987), and the International Civil Aviation Organization's (ICAO) Technical Instructions for the Safe Transport of Dangerous Goods by Air. The proposals contained in Docket HM-181, Notice No. 87-4, addressed hazard classification, packaging, and hazard communication. Revisions to modal requirements were not addressed. The intended effect of the revisions proposed herein is to align the current rail, air, and highway requirements in parts 174, 175, and 177 with the proposals previously addressed in Docket HM-181, Notice 87-4. If Docket HM-181 is promulgated in a final rule without corresponding revisions to parts 174, 175, and 177, the ensuing confusion could result in erroneous and uncoordinated application of the modal requirements. This action is necessary to provide for the acceptance and transportation of hazardous materials in a consistent manner.

DATES: Comments must be received on or before July 16, 1990.

ADDRESSES: Address comments to Dockets Unit (DHM-30), Office of Hazardous Materials Transportation. RSPA, U.S. Department of Transportation, Washington, DC 20590-0001. Comments should identify the docket and notice number and be submitted, when possible, in five copies. Persons wishing to receive confirmation of receipt of their comments should include a self-addressed, stamped postcard. The Dockets Unit is located in Room 8419 of the Nassif Building, 400 Seventh Street SW., Washington, DC 20590-0001. Office hours are 8:30 am to 5:00 pm Monday through Friday, except public holidays.

FOR FURTHER INFORMATION CONTACT: Beth Romo or Ray Gassaway, Standards Division, Telephone: (202) 366–4488, Office of Hazardous Materials Transportation, 400 Seventh Street SW., Washington, DC 20590-0001.

## SUPPLEMENTARY INFORMATION:

## I. Background

On May 5, 1987 RSPA (Research and Special Programs Administration) published a notice of proposed rulemaking (NPRM) (Docket No. HM-181; Notice 87-4) in the Federal Register (52 FR 16482) proposing sweeping changes to the HMR (Hazardous Materials Regulations), including the adoption of performance-oriented packaging standards and changes in hazard communication, hazard classification and bulk packaging requirements. The proposed regulatory text of Docket No. HM-181, Notice 87-4, was republished in its entirety on November 6, 1987 (52 FR 42772), in order to make certain corrections and to supplement certain of the proposals contained in the May 5, 1987 publication. Please refer to HM-181, Notice 87-4, for additional background information. RSPA also published in the Federal Register under Docket No. HM-181, Notice 87-4, two supplemental NPRMs (Notice 88-7, 53 FR 45868, published November 14, 1988 and Notice 89-5, 54 FR 31158, published July 26, 1989) addressing the classification of gases which are toxic by inhalation.

It has been RSPA's intent to develop complementary rulemakings for each transportation mode in order to harmonize current requirements for the acceptance and transportation of hazardous materials with those proposals set forth in HM-181, Notice 87-4. In this notice, RSPA is proposing to amend parts 174, 175, and 177 by specifying both international and DOT equivalency for hazard classes (international numeric class and division number and the corresponding DOT hazard class), quantities (metric measures and U.S. standard unit equivalents), packagings (packing groups and DOT specifications), and by making certain other conforming changes, such as in section references, to correspond with changes proposed under HM-181, Notice 87-4. We are not proposing in this document to amend 49 CFR part 176, Carriage by Vessel. Revisions to part 176 will be addressed in a forthcoming document which will include the consolidation of requirements for transporting explosives by vessel.

In this notice, we are proposing to amend the Segregation and Separation Charts set forth in §§ 174.81(d) and 177.848(d) for the carriage of hazardous materials by rail and public highway, respectively. The proposed revisions

would be parallel for both surface modes and consistent with the provisions in the International Maritime Dangerous Goods (IMDC) Code and the U.N. Recommendations on the Transport of Dangerous Goods. A new explosives loading and storage table would be added to §§ 174.81 and 177.848 for use when different classification groups of Class 1 (explosive) materials are transported in the same rail car or transport vehicle. An explanation of compatibility groups and classification codes can be found in Table 4.1 of the United Nations Recommendations on the Transport of Dangerous Goods, sixth revised edition.

The proposals in this notice are, for the most part, non-substantive changes to parts 174, 175, and 177. These revisions would incorporate U.N. hazard class and division numbers, metric measures, packaging provisions, and section references. For example, many of the changes proposed in this document entail replacing the existing DOT hazard class (e.g., flammable liquid) with both the new hazard class nomenclature and the current DOT hazard class (e.g., Class 3 (flammable liquid) material). The intent of this proposed action is to provide uniformity and conformance with international standards in a manner consistent with the proposals set forth in HM-181, Notice 87-4. The changes proposed in this notice to amend the modal requirements in parts 174, 175, and 177 would be incorporated into any final rule promulgated under Docket HM-181 The following is a section-by-section summary of the proposed amendments:

Part 174--Carriage by Rail

Throughout 49 CFR part 174, RSPA is proposing to add the international numeric hazard class and division number where appropriate to conform with proposed adoption of the U.N. Recommendations. Metric measures and placard names, as proposed in Docket HM-181, Notice 87-4 (52 FR 42772), would be added to appropriate sections of the part. Other revisions to the part would be as follows:

Section 174.25. The table specifying placard notations and endorsements would be revised for clarity and to include the international numeric hazard class and division numbers. In addition, placard names, as proposed in Docket HM-181, Notice 87-4, would be incorporated.

Section 174.81. The section would be retitled "Segregation of Hazardous Materials". The introductory language and the segregation table in existing § 174.81 would be revised and set forth

in proposed paragraph (d). Paragraph (a) would be removed because the separation of Class 8 (corrosive) materials and Division 1.1 or 1.2 (explosive) materials would be addressed in the proposed segregation table. A new paragraph (a) would be added to provide a statement of the applicability of the section. Current paragraph (b) would be revised and redesignated paragraph (c) to include existing provisions from § 177.848(b), but without the phrase "or any other acidic materials which could release hydrocyanic acid from cyanides", as it is believed any commingling of cyanides or cyanide mixtures with acids or other acidic materials will release hydrocyanic acids. Current paragraph (c) would be removed because the existing requirement would be addressed in the proposed compatibility table for Class 1 (explosive) materials in proposed paragraph (f). Current paragraph (d) would be removed as carboys would no longer be an authorized non-bulk packaging under the provisions of Docket HM-181, Notice 87-4. Paragraph (e) would be removed as provisions regulating smokeless powder for small arms, transported by rail or highway, are addressed in proposed § 173.171 of Docket HM-181, Notice 87-4. Paragraph (f) would be redesignated paragraph (d). A new paragraph (f) would introduce the compatibility table for Class 1 (explosive) materials.

The segregation table instructions would be revised to clarify that its provisions also apply to materials held in storage facilities during the course of transportation. The segregation table would be revised by replacing proper shipping names with U.N. hazard classes or divisions. Segregation of hazardous materials would be required where the letter "X" is located at the intersection of two hazard classes or divisions. The reader will find an index to hazard class definitions in HM-181, Notice 87-4 [52 FR 42772 at 42949]. The letter "O" would be added to the instructions and segregation table to indicate separation of classes and divisions of hazardous materials by a minimum distance of 1.2 m or 4 feet in any direction to enhance transportation safety. Segregation of Class 8 (corrosive) liquids from Class 1 (explosive) materials would be addressed in the proposed segregation table. Comments specifically addressing this proposed revision are welcome. An """ would be added to the segregation table to indicate that segregation among different Class 1 (explosive) materials

would be governed by the compatibility table in paragraph (f) of this section.

Division 1.6 (extremely insensitive explosive) materials and Division 6.1 (poisonous liquids; packing group I only) materials would be added to the segregation table in accordance with the IMDG Code. Segregation of Division 1.6 (extremely insensitive explosive) materials from other Class 1 (explosive) materials would be provided for in the compatibility table for Class 1 (explosive) materials in proposed paragraph (f). For the purposes of the segregation table, Division 6.1 would include only poisonous liquids in Packing Group I, as defined in HM-181. Notice 87-4 (52 FR 42772 at 42961). The segregation requirements for these poisonous liquids would be the same as those proposed for Division 2.3 gases in Packing Group I because of their similar hazards.

New provisions to enhance safety and maintain consistency with the IMDG Code would address the segregation of Class 8 (corrosive) liquids from Division 1.3 (class B) special fireworks or railway torpedoes: Division 1.3 (explosive) materials from Division 2.1 (flammable gas) materials, Class 3 (flammable liquid) materials, Division 4.2 (spontaneously combustible) materials, Division 4.3 (dangerous when wet) materials, Division 5.1 (oxidizer) materials, and Division 5.2 (organic peroxides) materials; and Division 1.5 (very insensitive explosive) materials from all hazard classes and divisions except other Class 1 (explosive) materials.

Footnote (1), currently reserved, would be removed. Footnote (2), regarding co-loading Class 8 (corrosive) liquids with Division 4.1 (flammable solid) materials, or Division 5.1 (oxidizer) materials, would be revised by separating Class 3 (flammable liquid) materials, and Division 5.2 (organic peroxides) materials from Class 8 (corrosive) liquids, as indicated in proposed paragraph (d) of this section. Footnote (3) would be removed as it would be addressed in the proposed compatibility table for Class 1 (explosive) materials in proposed paragraph (f). Footnote (4), regarding Department of Defense (DOD) coloading exceptions for explosives, would be removed. In proposed paragraphs (e)(4) (i) and (ii), proposed Note A would clarify the existing provisions currently contained in footnote (5), and proposed Note B would require materials identified in the proposed segregation table by the letter "O" to be palletized separately by class or division. Minimum pallet height requirements

have been proposed to mitigate the commingling potential among certain hazardous materials. Footnote (6) would be removed because escort shipments of Class 7 (radioactive) materials and Class 1 (explosive) materials under the direction of the Department of Defense or the Department of Energy are not subject to the HMR under current provisions in existing § 173.7.

A new loading and storage table would be added for use when different compatibility groups of Class 1 (explosive) materials are transported on the same rail car, unless loaded in separate freight containers. An "X" at the intersection of two compatibility groups would indicate that those explosives shall not be carried on the same rail car, unless stowed in separate freight containers mounted on the rail car. In accordance with the U.N. Recommendations on the Transport of Dangerous Goods, Class 1 explosives are considered "compatible" if they can be transported together without significantly increasing either the probability of an accident, or the magnitude of the effects of an accident if one should occur. An explanation of classification codes and compatibility groups can be found in Table 4.1 of the U.N. Recommendations on the Transport of Dangerous Goods, sixth revised edition. With one exception, explosives of the same compatibility group but of different divisions could be transported together, provided that the entire shipment is handled and transported as though it was comprised solely of Class 1 (explosive materials having the lower division number. For example, a mixed shipment of Division 1.2 (Class A explosive) materials and Division 1.4 (Class C explosive) materials, compatibility group D, would be transported as Division 1.2 (Class A explosive) materials. However, when explosives of Division 1.5, compatibility group D, are transported in the same freight container as explosives of Division 1.2, compatibility group D, the total shipment must be handled and transported as Division 1.1, compatibility group D, consistent with § 4.6.3(b) of the U.N. Recommendations on the Transport of Dangerous Goods. In paragraphs (g)(2)(i) through (iii), Notes 1 and 2 would prescribe additional loading and storage provisions applicable to the transportation of explosives that are consistent with § 5.3 of the IMDG Code, entitled "Separation" of goods of Class 1 of different compatability groups." Note 3 would be an additional loading and storage provision applicable to the transportation of those Class 1

(explosive) materials that have been assigned to compatibility group N.

Subpart D—Handling of Placarded Cars. Subpart D would be revised by adding a new § 174.82, consolidating switching requirements from §§ 174.83, 174.84, and 174.85 into \$ 174.83, and incorporating the rail car positioning requirements of §§ 174.86 through 174.93 into a new § 174.85. Newly added § 174.85 would contain an introductory paragraph and a chart illustrating proposed train placement requirements. These changes to the current train placement requirements would result in more restrictive train position requirements for Division 2.3 (PG I, Zone A. poisonous gas) and Division 6.1 (PG I, Zone A. poisonous liquid) materials and for Division 1.3 (Class B explosive) materials. The changes would lessen the restrictions on Division 1.1 and 1.2 (Class A explosive) materials, with regard to train positioning next to specially-equipped flat cars in TOFC/ COFC and auto carriers. The proposed format of the chart is patterned after a train position chart in the **Transportation of Dangerous Goods** Regulations, issued by the Government of Canada, as well as charts published in various rail industry timetables and special instructions for the transportation of hazardous materials. RSPA believes the increased clarity of this proposed chart will provide substantial safety benefits. The chart separates hazard classes into Placard Groups based on comparable risks. For example, Placard Group 2 would consist of all Class 3 (flammable liquid), Class 4 (flammable solid), Class 5 (oxidizing), and Class 8 (corrosive) materials. Class 1 (explosive), Class 2 (gases), and Class 6 (poisonous) materials would also be included in Placard Group 2, except for explosives in Division 1.1 or 1.2 and poisonous gases or liquids in Division 2.3 (PG I, Zone A) or 6.1 (PG I, Zone A) which pose a greater risk and require additional restrictions. A section by section description of the proposed changes follows:

Section 174.82. General handling requirements for placarded rail cars, transport vehicles, freight containers, and bulk packages would be consolidated into this new section.

Section 174.83. This section would be rewritten to incorporate and clarify the current switching and yard, siding, or side track placement provisions of \$\$ 174.83 through 174.85.

Section 174.84. This section would replace current § 174.86 and would address train placement of placarded rail cars, transport vehicles, freight containers, and bulk containers, accompanied by guards or technical

escorts. The phrase "temperature control equipment" would replace the phrase "lighted heater or stove" and would consist of automatic refrigerating or heating apparatus in operation, or lighted heaters or stoves.

Section 174.85. An introductory paragraph and a new chart illustrating train placement of rail cars transporting hazardous materials would replace the current section.

Section 174.86. This section would be incorporated into proposed § 174.84.

Sections 174.87 through 174.93. These sections would be incorporated into proposed § 174.85.

Subparts E through M

Section 174.280. The poison label requirement would be replaced by a requirement for a poisonous gas label.

Section 174.290. The reference to DOT packaging would be replaced by reference to the packaging requirements proposed under Docket HM-181, Notice 87-4.

Section 174.300. Current paragraph (d) would be removed and redesignated as new § 174.430. Paragraph (e) would be redesignated paragraph (d).

Section 174.410. The reference to DOT packaging would be replaced by reference to the packaging requirements proposed under Docket HM-181, Notice 87-4.

Section 174.510. The reference to § 173.182(b) would be removed.

Section 174.615. The chemical name for Paris green would be added.

Section 174.800. All references to carboys would be removed.

Section 174.810. The prohibition against the loading and storage of electric storate batteries (wet) with explosives would be removed, as it would be addressed in the Segregation Table in § 174.81. The reference to "§ 173.258" would be changed to "§ 173.159".

Section 174.812. The section, which prescribes special handling requirements for nitric acid in carboys, would be removed. Carboys would no longer be an authorized non-bulk packaging under the provisions of HM-181, Notice 87-4.

Section 174.840. The reference to "173.1090" would be changed to "\\$ 173.216".

Part 175—Carriage by Aircraft

Throughout 49 CFR part 175, RSPA is proposing to add the international numeric hazard class and division number where appropriate to conform with proposed adoption of the U.N. Recommendations. Metric measures and placard names, as proposed in Docket HM-181, Notice 87-4 [52 FR 42772],

would be added to appropriate sections of the part. Other revisions to the part would be as follows:

Section 175.10. The reference to "§ 173.615(a)" would be revised to read "§ 173.217", and "§ 173.260(d)" would be revised to read "§ 173.159(d)".

Section 175.45. The words "etiologic

Section 175.45. The words "etiologic agent" would be replaced with "etiologic or infectious substance".

Section 175.85. The references to "ICAO" in paragraphs (c)(1)(i), (c)(1)(ii), and (c)(1)(iv) would be removed as they would no longer be necessary, paragraph (c)(1)(iii) and (c)(1)(vii) would be removed, and paragraphs (c)(1)(iv) through (c)(1)(vi) would be redesignated (c)(1)(iii) through (c)(1)(v).

Section 175.90. The words "etiologic agent" would be replaced with "etiologic or infectious substance".

Section 175.305. The reference to "§ 173.120" would be revised to read "§ 173.220".

Section 175.310. The reference to DOT packaging would be replaced by a reference to the packaging proposed under Docket HM-181, Notice 87-4.

Section 175.320. The Table would be revised to clarify that Division 1.4 (Class C) detonators and detonating primers would be permitted aboard the same aircraft as Division 1.1 or 1.2 detonators or detonating primers.

Section 175.630. The label for etiologic agent would be replaced by an infectious substance label.

Section 175.640. The reference to "\$ 173.1090" would be revised to read \$ "173.216".

Part 177—Carriage by Public Highway

Throughout 49 CFR part 177, RSPA is proposing to add the international numeric hazard class and division number where appropriate to conform with proposed adoption of the U.N. Recommendations. Metric measures and placard names, as proposed in Docket HM-181, Notice 87-4 (52 FR 42772), would be added to appropriate sections of the part. Other revisions to the part would be as follows:

Section 177.818. The water capacity limit per package for flammable cryogenic liquids would be measured in liters and decreased from 125 gallons to 450 liters (118.9 gallons) to provide consistency with the definitions in existing § 171.8 for bulk and non-bulk packagings.

Section 177.837. Paragraph (d) addressing pyroforic liquids would be removed from this section and added to § 177.838. Paragraph (e) would be redesignated as paragraph (d).

Section 177.838. The reference to DOT packaging would be replaced by a

reference to the packaging proposed under Docket HM-181, Notice 87-4; the reference to § 173.182(b) would be removed; and paragraph (d) of current § 174.837, addressing pyroforic liquids, would be added as new paragraph (h).

Section 177.839. All references to carboys would be removed.

Section 177.840. In paragraph (h), the water capacity limit per package for flammable cryogenic liquids would be measured in liters and decreased from 125 gallons to 450 liters (118.9 gallons) to provide consistency with the definitions in existing § 171.8 for bulk and non-bulk packagings.

Section 177.844. The reference to § 173.1090 would be changed to § 173.216.

Section 177.848. The section would be retitled "Segregation of Hazardous Materials". The introductory language and the segregation table in existing § 177.848 would be revised and set forth in proposed paragraph (d). Paragraph (a) would be removed because the separation of Class 8 (corrosive) materials and Division 1.1 or 1.2 (explosive) materials would be addressed in the proposed segregation table. A new paragraph (a) would be added setting forth the applicability of the section. Current paragraph (b) would be revised and redesignated paragraph (c) to include existing provisions from current § 177.848(b), but without the phrase "any other acidic materials which could release hydrocyanic acid from cyanides", as it is believed any commingling of cyanides or cyanide mixtures with acids or other acidic materials will release hydrocyanic acids. Current paragraph (c) would be removed because the existing requirement is addressed in the proposed compatibility table for Class 1 (explosive) materials in proposed paragraph (f). The current paragraph (d) would be removed as carboys would no longer be an authorized non-bulk packaging under the provisions of Docket HM-181, Notice 87-4. Paragraph (e) would be removed as provisions regulating smokeless powder for small arms, transported by rail or highway, are addressed in proposed § 173.171 of Docket HM-181, Notice 87-4. Paragraph (f) would be redesignated paragraph (d). A new paragraph (f) would be added to introduce the compatibility table for Class 1 (explosive) materials.

The segregation table instructions would be revised to clarify that its provisions also apply to materials held in storage facilities during the course of transportation. The segregation table would be revised by replacing proper shipping names with U.N. hazard classes or divisions. Segregation of

hazardous materials would be required where the letter "X" is located at the intersection of two hazard classes or divisions. The reader will find an index to hazard class definitions in HIM-181, Notice 87-4 (52 FR 42772 at 42949). The letter "O" would be added to the instructions and segregation table to indicate separation of classes and divisions of hazardous materials by a minimum distance of 1.2 m or 4 feet in any direction to enhance transportation safety. Segregation of Class 8 (corrosive) liquids from Class 1 (explosive) materials would be addressed in the proposed segregation table. Comments specifically addressing this proposed revision are welcome. An "" would be added to the segregation table to indicate that segregation among different Class 1 (explosive) materials would be governed by the compatibility table in paragraph (f) of this section.

Division 1.6 (extremely insensitive explosive) materials and Division 6.1 (poisonous liquids; packing group I only) materials would be added to the segregation table in accordance with the IMDG Code. Segregation of Division 1.6 (extremely insensitive explosive) materials from other Class 1 (explosive) materials would be explained in the compatibility table for Class 1 (explosive) materials in proposed paragraph (f). For the purposes of the segregation table, Division 6.1 would include only poisonous liquids in Packing Group I. as defined in HM-181. Notice 87-4. The segregation requirements for these poisonous liquids would be the same as those proposed for Division 2.3 gases in Packing Group I because of their similar hazards.

New provisions to enhance safety and maintain consistency with the IMDG Code would address the segregation of Class 8 (corrosive) liquids from Division 1.3 (class B) special fireworks or railway torpedoes: Division 1.3 (explosive) materials from Division 2.1 (flammable gas) materials, Class 3 (flammable liquid) materials, Division 4.2 (spontaneously combustible) materials, Division 4.3 (dangerous when wet) materials, Division 5.1 (oxidizer) materials, and Division 5.2 (organic peroxides) materials; and Division 1.5 (very insensitive explosive) materials from all hazard classes and divisions except other Class 1 (explosive) materials.

Footnote (1), regarding the segregation of Class 1 (explosive) materials, would be removed and addressed in the proposed compatibility table for Class 1 (explosive) materials. Footnote (2), regarding co-loading Class 8 (corrosive) liquids with Division 4.1 (flammable solid) materials, or Division 5.1

(oxidizer) materials, would be revised by separating Class 3 (flammable liquid) materials, and Division 5.2 (organic peroxides) materials from Class 8 (corrosive) liquids, as indicated in proposed paragraph (d) of this section. Footnote (3) would be removed as it would be addressed in the proposed compatibility table for Class 1 (explosive) materials in proposed paragraph (f). Footnote (4), regarding Department of Defense co-loading exceptions for explosives, would be removed. In proposed paragraphs (e)(4) (i) and (ii), Note A would clarify the existing provisions currently contained in footnote (5), and Note B would require materials identified in the proposed segregation table by the letter "O" to be palletized separately by class or division. Minimum pallet height requirements have been proposed to mitigate the commingling potential among certain hazardous materials. Footnote (6) would be removed because escort shipments of Class 7 (radioactive) materials and Class 1 (explosive) materials under the direction of the Department of Defense or the Department of Energy are not subject to the HMR under current provisions in existing **§ 173.7.** 

A new loading and storage table would be added in proposed paragraph (f) for use when different compatibility groups of Class 1 (explosive) materials are transported in the same transport vehicle. An "X" at the intersection of two compatibility groups would indicate that those explosives shall not be carried in the same transport vehicle. In accordance with the U.N. Recommendations on the Transport of Dangerous Goods, Class 1 explosives are considered "compatible" if they can be transported together without significantly increasing either the probability of an accident, or the magnitude of the effects of an accident if one should occur. An explanation of classification codes and compatibility groups can be found in Table 4.1 of the United Nations Recommendations on the Transport of Dangerous Goods, sixth revised edition. With one exception, explosives of the same compatibility group but different divisions could be transported together, provided that the entire shipment is handled and transported as though it is comprised solely of Class 1 (explosive) materials having the lower division number. For example, a mixed shipment of Division 1.2 (Class A explosive) materials and Division 1.4 (Class C explosive) materials, compatibility group D, would be transported as Division 1.2 (Class A explosive) materials. However, when

explosives of Division 1.5, compatibility group D, are transported in the same freight container as explosives of Division 1.2, compatibility group D, the total shipment must be handled and transported as Division 1.1, compatibility group D. This is consistent with section 4.6.3(b) of the U.N. Recommendations on the Transport of Dangerous Goods.

In paragraphs (g)(2) (i) through (iii), Notes 1 and 2 would prescribe additional loading and storage provisions applicable to the transportation of explosives that are consistent with section 5.3 of the IMDG Code, entitled "Separation of goods of Class 1 of different compatibility groups." Note 3 would be an additional loading and storage provision applicable to the transportation of those Class 1 (explosive) materials that have been assigned to compatibility group N.

#### II. Administrative Notices

## A. Executive Order 12291

The RSPA has determined that this rulemaking: (1) Is not "major" under Executive Order 12291; (2) is not "significant" under DOT's regulatory policies and procedures (44 FR 11034); (3) will not affect not-for-profit enterprises or small governmental jurisdictions; and (4) does not require an environmental impact statement under the National Environmental Policy Act (40 U.S.C. 4321 et seq.). A regulatory evaluation is available for review in the docket.

## B. Executive Order 12612

This proposed action has been analyzed in accordance with the principles and criteria in Executive Order 12612, and it has been determined that the proposed rule does not have sufficient Federalism implications to warrant the preparation of a Federalism Assessment. This proposal has no substantial direct impact on the States. on the Federal-State relationship, or on the distribution of power and responsibilities among levels of government. Therefore, this proposed rulemaking contains no policies with

Federalism implications as defined in Executive Order 12612.

## C. Regulatory Flexibility Act

The proposed changes to the current modal requirements would generally affect persons involved in the handling, transport, and storage (incident to transportation) of hazardous materials, some of whom may be small entities. The changes would involve becoming familiar with new terminology and would impose little or no cost on those entities. Based on limited information concerning the size and nature of entities likely to be affected by this proposed rule, I certify that the regulations proposed within would not, if promulgated, have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

## List of Subjects

## 49 CFR Part 174

Hazardous materials transportation, Radioactive materials, Railroad safety.

#### 49 CFR Part 175

Air carriers, Hazardous materials transportation, Radioactive materials, Reporting and recordkeeping requirements.

### 49 CFR Part 177

Hazardous materials transportation, Motor carriers, Radioactive materials, Reporting and recordkeeping requirements.

For the reasons set out in the preamble, Title 49, Chapter I. Subchapter C of the Code of Federal Regulations would be amended as set forth below:

## PART 174-CARRIAGE BY RAIL

1. The authority citation for part 174 would continue to read as follows:

Authority: 49 U.S.C. App. 1803, 1804, 1808, 49 CFR 1.53(e), 1.53, App. A to part 1.

## § 174.8 [Amended]

2. In § 174.8, j the phrase "Cla be removed and replaced with the phrase "Division 1.1 or 1.2 (Class A explosive) materials".

#### § 174.10 [Amended]

- 3. In § 174.10, the following changes would be made:
- a. In paragraph (a), the phrase "EXPLOSIVES A" would be removed and replaced with the phrase "EXPLOSIVES 1.1 or 1.2 (EXPLOSIVES
- b. In paragraph (d), the word "explosives" would be removed and replaced with the phrase "Class 1 (explosive) materials".

## § 174.14 [Amended]

4. In § 174.14, paragraph (b), the phrase "flammable liquid or gas, or a poison gas" would be removed and replaced with the phrase "Division 2.1 (flammable gas), Division 2.3 (poisonous gas) or Class 3 (flammable liquid) material".

## § 174.16 [Amended]

- 5. In § 174.16, the following changes would be made:
- a. In paragraph (a), the word "explosives" would be removed and replaced with the phrase "Class 1 (explosive) materials".
- b. In paragraphs (b)(1), (b)(2), and (b)(3), the phrase "Class A explosives" would be removed and replaced with the phrase "Division 1.1 or 1.2 (Class A explosive) materials".

## § 174.18 [Amended]

- 6. In § 174.18, the word "explosives" would be removed and replaced with the phrase "Class 1 (explosive) materials" in both places it appears.
- 7. In § 174.25, paragraph (a)(2), the table would be revised to read as follows:

#### § 174.25 Additional information on waybills, switching orders and other billings.

paragraphs (b) and (c),	(a) * *
ass A explosives" would	(2) * *

Class/Division	Hazardous material	Placard notation	Placard endorsement
Division 1.1 or Division 1.2	Explosives (Class A)	Placarded EXPLOSIVES 1.1 or EXPLOSIVES 1.2	Explosives.
ı	Explosive chemical ammunition containing Division 2.3 gas.	Placarded EXPLOSIVES 1.1 or EXPLOSIVE 1.2. & POSION GAS.	Explosives and poison gas
Division 1.3	Explosives (Class B)	Placarded EXPLOSIVES 1.3	Dangerous.
Division 1.4	Explosives (Class C)	Placarded EXPLOSIVES 1.4	Do.
Division 1.5	Blasting Agent	Placarded EXPLOSIVES 1.5	Do.
		Placarded EXPLOSIVES 1.6	
Division 2.1	Flammable gas	Placarded FLAMMABLE GAS	Do.
		Placarded NONFLAMMABLE GAS	Do.
Division 2.3	Poisonous gas	Placarded POISON GAS	Poison gas.
		Placarded FLAMMABLE	
Class 3	Combustible Liquid	Placarded COMBUSTIBLE	Do.

Class/Division Hazardous material		Placard notation	Placard endorsement
class 4	Flammable solid	Placarded FLAMMABLE SOLID, SPONTANEOUS- LY COMBUSTIBLE OF DANGEROUS WHEN WET.	Do.
ivision 5.1	Oxidizer	Placarded OXIDIZER	Do.
ivision 5.2	Organic peroxide	Placarded ORGANIC PEROXIDE	Do.
ivision 6.1	Poisonous/Irritating	Placarded POISON	Do.
			Radioective material.
			Dangerous.
combustible liquid.	ue of a hazardous material other than a	See Sec. 174.25(c)	Do.
ank cars which contain a residue of	a combustible liquid	See Sec. 174.25(c).	

#### § 174.25 [Amended]

- 8. In § 174.25, the following changes would be made:
- a. In § 174.25, paragraph (a)(2)(i), the phrase "% of an inch" would be removed and replaced with the phrase "1 cm (0.4 inch)".
- b. In paragraph (a)(2)(ii), the phrase "% of an inch" would be removed and replaced with the phrase ".25 cm (0.1 inch)".
- c. In paragraph (c), the phrase "Combustible liquid" would be removed and replaced with the phrase "Class 3".
- d. In paragraph (d), the phrase "Explosives A" would be removed and replaced with the phrase "Division 1.1 or 1.2 (Class A explosive) materials" each place it appears.

#### § 174.26 [Amended]

9. In § 174.26, paragraph (a), the phrase "EXPLOSIVE A" would be removed and replaced with the phrase "EXPLOSIVES 1.1 or 1.2 (EXPLOSIVES A)".

## § 174.47 [Amended]

10. In § 174.47, paragraphs (a) and (b), the word "explosives" would be

removed and replaced with the phrase "Class 1 (explosive) materials".

#### § 174.49 [Amended]

11. In § 174.49, the phrase "flammable liquids, gases, or vapors" would be removed and replaced with the phrase "Division 2.1 (flammable gas) or Class 3 (flammable liquid) materials or vapors".

#### § 174.50 [Amended]

12. In § 174.50 paragraph (d), the phrase "three inches in size" would be removed and replaced with the phrase "7.5 cm (3 inches) in size".

## § 174.67 [Amended]

- 13. In § 174.67, the following changes would be made:
- a. In paragraph (a)(3), the phrase "12 inches high by 15 inches wide" would be removed, replaced with the phrase "30 cm (35 inches) high by 38 cm (15 inches) wide", the phrase "4 inches high" would be removed and replaced with the phrase "10 cm (3.9 inches)", and the phrase "2 inches high" would be removed and replaced with the phrase "5 cm (2 inches)".

b. In paragraph (k), the phrase "36 inches long" would be removed and

replaced with the phrase "1 meter (3.3 feet) long".

14. Section 174.81 would be revised to read as follows:

## § 174.81 Segregation of hazardous materials.

- (a) This section applies to materials which meet one or more of the hazard classes defined in this subchapter and are in packages which are required to be labeled or placarded under the provisions of part 172 of this subchapter.
- (b) In addition to the provisions of paragaph (d) of this section, when a rail car is to be transported by vessel, other than a ferry vessel, hazardous materials on or within that rail car shall be stowed and segregated in accordance with §§ 176.83 and 176.44 of this subchapter.
- (c) In addition to the provisions of paragraph (d) of this section, cyanides or cyanide mixtures shall not be leaded or stored with acids.
- (d) Hazardous materials shall not be loaded, transported, or stored together, except as provided in this section and in accordance with the following Table.

## SEGREGATION TABLE FOR HAZARDOUS MATERIALS

Class or division		Notes	1.1	1.3	1.4	1.5	1.6	2.1	2.2	2.3 gases packing group I only	3	4.1	4.2	4.3	5.1	5.2	6.1 Figuids packing group I only	7	8 liquids only
Explosives	1.1 and 1.2	_						×	х	х	X	x	×	×	×	х	x	x	×
Explosives	1.3	1					[ •	x	1"	Ŷ	x		X	X	x	X	¥		X
	1.4	ĺ		١.				ô	1	ô	Ô	l	ô	"	"	-	Ô	1	0
Explosives		ļ			١.		١.	x	x	lv	×	х	x	x	x	x	x	x	X
Very insensitive explosives.	1.5	ļ						^	^	^	^	^	^	1	^	^	1	^	1
Extremely insensitive explosives.	1.6			•					1										
Flammable gases	2.1		X	X	0	X	Ł	1		0	1		0	0	0	0	0	0	0
Non-toxic, non-flammable gases.	2.2		×			×				Į Į									
Poisonous gases: packing group I only.	2.3		×	X	0	×		0	ļ	<b>†</b>	×	X	Х	×	X	×			×
Flammable liquids	- 3	В	X	X	0	X		ŀ	į	X	1	0	0	0	0	0	×	!	10
Flammable solids	4.1	В	X	1		l x	1	ł	ŀ	x	lo	1	ł	ł	1	[	X	1	0
Spentaneously combustible materials.	4.2		X	x	0	X		o		×	0						×		×
Dangerous when wet materials.	4.3		×	×		×		0		X	0						X		X
Oxidizers	5.1	A.B	X	X	1	x	l	0	ŀ	х	0	ľ	1	1	1		x	1	0
Organic peroxides	5.2	1 '	X	X	1	X	1	0	1	×	lo	Ì	1	1	ļ	1	+ x	1	0

SEGREGATION '	TARLE FOR	HAZARDOUS	MATERIAL C.	Continued

Class or division		Notes	1.1	1.3	1.4	1.5	1.6	2.1	2.2	2.3 gases packing group I only	3	4.1	4.2	4.3	5.1	5.2	6.1 liquids packing group I only	7	8 liquids only
Poisonous liquids: packing group I only. Radioactive materials Corrosive liquids	6.1 7 8	8	X X	x	0	×		0 00		x	x o	×	x	x ·	x	x	×		×

- (e) Instructions for using the Segregation Table for Hazardous Materials set forth in paragraph (d) of this section are as follows:
- (1) The letter "X" in the Table means that these materials shall not be loaded, transported, or stored together in the same rail car or storage facility during the course of transportation.
- (2) The letter "O" in the Table means that these materials shall not be loaded, transported, or stored together in the same rail car or storage facility during the course of transportation, unless
- separated by a distance of 1.2 m (4 feet) in all directions.
- (3) The "\*" in the Table means that segregation among different Class 1 (explosive) materials is governed by the Compatibility Table in paragraph [f] of this section.
- (4) The notes in the second column of the Table mean the following:
- (i) "A" means that ammonium nitrate fertilizer may be loaded or stored with Division 1.1 (Class A explosive) materials.
- (ii) "B" means that the materials for which an "O" appears in the Table may be loaded and transported together if each class or division is separately palletized at a minimum height of 10.6 cm (4 inches) off the floor of the rail car and separated by a distance of 1.2 m (4 feet) in all directions.
- (f) Class 1 (explosive) materials shall not be loaded, transported, or stored together, except as provided in this section and in accordance with the following Table.

## COMPATIBILITY TABLE FOR CLASS 1 (EXPLOSIVE) MATERIALS

Compatibility group	A	В	С	D	Ε	F	G	Н	J	K	L	N	8
A BC DEFG H J K L N S	XXXXXXXXXXX	X X X X X X X X X X	X 2 2 X X X X X X X X X X X X X X X X X	X	X	X X X X X X X X X X	XXXXX XXXX	X X X X X X X X X X	X X X X X X X X X X	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	X X X X X X X X X X X X X X X X X X X	XX333XXXXXX	x

- (g) Instructions for using the Compatibility Table for class 1 (explosive) materials set forth in paragraph (f) of this section are as follows:
- (1) The letter "X" in the Table means that explosives of different compatibility groups shall not be carried on the same rail car, unless packed in separate freight containers (e.g., two or more freight containers mounted upon the same rail car).
- (2) The notes in the Table mean the following:
- (i) "1" means explosives from compatibility group L shall only be carried on the same rail car with an identical explosive.
- (ii) "2" means any combination of explosives from compatibility groups C. D, or E is assigned to compatibility group E.

- (iii) "3" means any combination of explosives from compatibility groups C, D, or E with those in compatibility group N is assigned to compatibility group D.
- (h) With one exception, explosives of the same compatibility group but of different divisions may be transported together, provided that the whole shipment is handled and transported as though its entire contents were comprised of the lower division. For example, a mixed shipment of Division 1.2 (Class A explosive) materials and Division 1.4 (Class C explosive) materials, compatibility group D, must be handled and transported as Division 1.2 (Class A explosive) materials. However, when Division 1.5 (blasting agent) materials, compatibility group D, are transported in the same freight container as Division 1.2 (Class A explosive) materials, compatibility group D, the shipment must be handled
- and transported as Division 1.1 (Class A explosive) materials, compatibility group D.
- 15. The subpart D heading would be revised to read as follows:

# Subpart D—Handling of Placarded Rall Cars, Transport Vehicles and Freight Containers

- 16. A new § 174.82 would be added to read as follows:
- § 174.82 General requirements for the handling of placarded rail car, transport vehicles, freight containers, and bulk packages.
- (a) Unless otherwise specified, this subpart does not apply to the handling of rail cars, transport vehicles, freight containers, or bulk packagings, which contain Class 3 combustible liquids, Class 6, Packing Group III materials,

Class 9 materials, or ORM-D or ORM-E materials.

- (b) A placarded rail cars, transport vehicle, freight container, or bulk package shall not be transported in a passenger train.
- 17. Section 174.83 would be revised to read as follows:
- § 174.83 Switching placarded rail cars, transport vehicles, freight containers, and bulk packagings.
- (a) (1) A loaded placarded tank car or a draft which includes a loaded placarded tank car may not be cut off until the preceding rail car clears the ladder track.
- (2) A loaded placarded tank car or a draft which includes a loaded placarded tank car must clear the ladder track before another rail car is allowed to follow.
- (b) A rail car shall not be allowed to move under its own momentum, or be coupled into or struck by any other rail car with more force than is necessary to complete the coupling, when any rail car is:
- (1) Placarded in Division 1.1 or 1.2 (Class A Explosives);
- (2) A tank car placarded in Division 2.3 (PG I, Zone A; poisonous gas) or 6.1 (PG I, Zone A; poisonous liquid);
- (3) A Class DOT 113 tank car transporting a Division 2.1 (flammable gas) material; or

- (4) A placarded flatear, or a flatear transporting a loaded placarded rail car, transport vehicle, freight container, or bulk packaging.
- (c) When transporting a rail car, transport vehicle, or freight container placarded for Division 1.1 or 1.2 (Class A explosive) materials in a terminal, yard, or on a side track or siding, the placarded rail car must be separated from the engine by at least one nonplacarded rail car and must be placed in a location so that it will be safe from danger of fire. A rail car, transport vehicle, or freight container placarded for Division 1.1 or 1.2 (Class A explosive) materials shall not be placed under a bridge or overhead crossing, or in or alongside a passenger shed or station, except during transfer operations.
- 18. Section 174.84 would be revised to read as follows:
- § 174.84 Position in train of loaded placarded rail cars, transport vehicles, freight containers or bulk packagings when accompanied by guards or technical escorts.

A rail car placarded in Division 1.1 or 1.2 (Class A explosive); Division 2.3 (PG I, Zone A; poisonous gas); or Division 6.1 (PG I, Zone A; poisonous liquid) in a moving or standing train must be next to and ahead of any car occupied by the guards or technical escorts

accompanying the placarded rail car. However, if a rail car occupied by the guards or technical escorts has temperature control equipment in operation, it must be the fourth car behind any car requiring Division 1.1 or 1.2 (Class A explosive) placards.

19. Section 174.85 would be revised to read as follows:

# § 174.85 Position in train of placarded cars, transport vehicles, freight containers, and bulk packagings.

- (a) Except as provided in paragraphs (b) and (c) of this section, the position in a train of each loaded placarded car, transport vehicle, freight container, and bulk packaging must conform to the provisions of this section.
- (b) A car placarded "RADIOACTIVE" must be separated from a locomotive, occupied caboose, or carload of undeveloped film by at least one non-placarded car.
- (c) A car placarded "RESIDUE" must be separated from a locomotive or occupied caboose by at least one nonplacarded car.
- (d) Position of rail cars in a train. In the following table:
- (1) Where an "X" appears at the intersection of a Placard Croup column and a Restriction row, the corresponding restriction applies.
- (2) "Rail Car" means a car other than a tank car.

## POSITION IN TRAIN OF PLACARDED CARS TRANSPORTING HAZARDOUS MATERIALS

	Placard group 1	Placam	group 2	Placard	group 3	Placard group 4
RESTRICTIONS	Rail car	Tank car	Rail car	Tank cer	Rail car	Rail car
When train length permits, placarded car shall not be nearer than	x	x		×		<u> </u>
the sixth car from the engine or occupied caboose. When train length does not permit, placarded car must be placed near the middle of the train, but not nearer than the second car from an engine or occupied caboose.	×	x		x		
An open-top car when any of the lading protrudes beyond the car ends or if shifted would protrude beyond the car ends.	<b>x</b>	x		х		
Loaded flat car except closed TOFC/COFC equipment, auto- carriers, and other specially-equipped cars with tie-down devices for handling vehicles. Permanent bulk head flat cars are consid- ered the same as open-top cars.	x	X		×		
Any car, piggyback, or container with temperature control equipment or internal combustion engine in operation.	x	×		×		
Placarded cars shall not be placed next to each other based on the following:		ļ				
acard Group 1acard Group 2		X	×	X	X	X
acard Group 3		X	X	x	x	X

Placard Group

Group 1—Divisions 1.1 and 1.2 (Class A explosive) materials.

Group 2—Divisions 1.3, 1.4, 1.5 (Class B and C explosive), Class 2 (compressed gas; other than Div 2.3, PG I, Zone A), Class 3 (flammable liquid), Class 4 (flammable solid), Class 5 (oxidizing), Class 6 (poisonous liquid) other than Div 6.1, PG I, Zone A), and Class 8 (corrosive) materials.

Group 3—Divisions 2.3 (PG I, Zone A) poisonous gas) and 6.1 (PG I, Zone A) poisonous liquid) materials.

Group 4-Class 7 (corrosive) materials.

## § 174.86 [Removed]

20. Section 174.86 would be removed.

#### § 174.87 [Removed]

21. Section 174.87 would be removed.

#### § 174.88 [Removed]

22. Section 174.88 would be removed.

## § 174.89 [Removed]

23. Section 174.89 would be removed.

#### § 174.90 [Removed]

24. Section 174.90 would be removed.

### § 174.91 [Removed]

25. Section 174.91 would be removed.

#### § 174.92 [Removed]

26. Section 174.92 would be removed.

## § 174.93 [Removed]

27. Section 174.93 would be removed. 28. The subpart E heading would be revised to read as follows:

#### Subpart E-Class 1 (Explosive) **Materials**

#### § 174.100 [Amended]

29. In § 174.100, the following changes would be made:

a. In the section heading and paragraph (b), the word "explosives" would be removed and replaced with the phrase "Class 1 (explosive) materials" each place it appears.

b. In paragraph (a), the word "Explosives" would be removed and replaced with the phrase "Class 1 (explosive) materials".

c. In paragraph (b), the word "explosive" would be removed and replaced with the phrase "Class 1 (explosive) materials".

#### § 174.101 [Amended]

30. In § 174.101, the following changes would be made:

a. In paragraph (b), the phrase "Class A or Class B explosives" would be removed and replaced with the phrase "Division 1.1, 1.2, or 1.3 (Class A or Class B explosive) materials", and the phrase "500 pounds" would be revised to read "225 kg (496 pounds)".

b. In paragraph (o) introductory text, the phrase "Class A or Class B explosives" would be removed and replaced with the phrase "Division 1.1, 1.2, or 1.3 (Class A or Class B explosive)

materials".

c. In paragraph (c), the phrase "high explosives, low explosives or black powder" would be removed and replaced with the phrase "Division 1.1 or 1.2 (Class A explosive) materials".

d. In paragraphs (a), (d), (h), and (l), the phrase "Class A explosives" would be removed and replaced with the phrase "Division 1.1 or 1.2 (Class A explosive) materials" and in paragraph (n) introductory text, the phrase "Class A explosive" would be removed and replaced with the phrase "Division 1.1 or 1.2 (Class A explosive) material".

e. In paragraph (h), the word "Explosives" would be removed and replaced with the phrase "Class 1

(explosive) materials" both places it

f. In the section heading and paragraphs (e), (f), (i), (j), (k), (n)(2), (o)(1), and (o)(4), the word "explosives" would be removed and replaced with the phrase "Class 1 (explosive) materials" each place it appears.

g. In paragraphs (n)(1), (n)(3), (o)(2), and (o)(3), the phrase "8 miles per hour" would be removed and replaced with the phrase "13 km (8.1 miles) per hour".

## § 174.102 [Amended]

31. In § 174.102, the following changes would be made:

a. In paragraphs (a) and (b), the phrase "Class A explosives" would be removed and replaced with the phrase "Division 1.1 or 1.2 (Class A explosive) materials".

b. In paragraph (b), "Explosives" and "explosives" would be removed and replaced with the phrase "Class 1 (explosive) materials" in both places they appear.

## § 174.103 [Amended]

32. In § 174.103, the following changes would be made:

a. In paragraph (a), the phrase "high explosives" would be removed and replaced with the phrase "Division 1.1 or 1.2 (Class A explosive) materials".

b. In paragraphs (a), (c) introductory text, and (e), the word "explosives" would be removed and replaced with the phrase "Class 1 (explosive) materials".

c. In paragraph (d), the phrase "at least 2 inches" would be removed and replaced with the phrase "at least 5 cm (2 inches)".

#### § 174.104 [Amended]

33. In § 174.104, the following changes would be made:

a. In the section heading and paragraphs (a), (b) introductory text, (c). (d), (e), and (f), the phrase "Class A explosives" would be removed and replaced with the phrase "Division 1.1 or 1.2 (Class A explosive) materials'

b. In paragraph (a), the phrase "80,000 pounds capacity" would be removed and replaced with the phrase "36,300 kg

(80,028 pounds) capacity"

c. In paragraphs (b)(4), (b)(7), and (b)(8), the word "explosives" would be removed and replaced with the phrase "Class 1 (explosive) materials"

d. In paragraph (b)(10), the phrase "three-eighths inch thick" would be removed and replaced with the phrase "1 cm (0.4 inch) thick".

e. In paragraph (b)(11), the phrase "at least 12 inches" would be removed and replaced with the phrase "at least 30 cm (11 8 inches)".

f. In paragraph (f), the phrase "7 by 7 inches or 6 by 8 inches" would be removed and replaced with the phrase "18 by 18 cm (7.1 by 7.1 inches) or 15 by 20 cm (5.9 by 7.9 inches)".

#### § 174.105 [Amended]

34. In § 174.105, in the section heading and text, the phrase "Class A explosives" would be removed and replaced with the phrase "Division 1.1 or 1.2 (Class A explosive) materials".

#### § 174.106 [Amended]

35. In § 174.106, in the section heading and paragraphs (a), (b), and (c), the phrase "Class A explosives" would be removed and replaced with the phrase "Division 1.1 or 1.2 (Class A explosive) materials".

## § 174.107 [Amended]

36. In § 174.107, the following changes would be made:

a. In the section heading and paragraphs (a) and (b), the phrase "Class A explosives" would be removed and replaced with the phrase "Division 1.1 or 1.2 (Class A explosive) materials".

b. In paragraph (b), the word "explosives" would be removed and replaced with the phrase "Class 1 (explosive) materials" each place it appears.

## § 174.109 [Amended]

37. In § 174.109, the word "explosives" would be removed and replaced with the phrase "Class 1 (explosive) materials"

## § 174.110 [Amended]

38. In § 174.110, the following changes would be made:

a. The phrase "Class A explosives" would be removed and replaced with the phrase "Division 1.1 or 1.2 (Class A explosive) materials".

b. The phrase "150 pounds" would be removed and replaced with the phrase "68 kg (149.9 pounds)".

c. The word "explosives" would be removed and replaced with the phrase "Class 1 (explosive) materials".

d. The phrase "1 inch thick" would be removed and replaced with the phrase "2.5 cm (0.98 inch) thick".

e. The phrase "2 inches high" would be removed and replaced with the phrase "5 cm (2 inches) high".

f. The phrase "EXPLOSIVES A placards" would be removed and replaced with the phrase "EXPLOSIVES 1.1 or 1.2 (EXPLOSIVES A) placards"

g. The phrase "Explosives A" would be removed and replaced with the phrase "Division 1.1 or 1.2 (Class A explosive) materials".

#### § 174.112 [Amended]

39. In § 174.112, in the section heading and paragraphs (a), (b), (c) introductory text, and (c)(3), the phrase "Class B explosives" would be removed and replaced with the phrase "Division 1.3 (Class B explosive) materials and Division 1.2 (devices corresponding to Class B explosive) materials" each place it appears.

#### § 174.114 [Amended]

- 40. In § 174.114, the following changes would be made:
- a. The paragraph (a) designation would be removed.
- b. The section heading phrase "EXPLOSIVES A' laden cars" would be removed and replaced with the phrase "Cars loaded with Division 1.1 or 1.2 (explosive) materials".
- c. The phrase "EXPLOSIVES A" placards" would be removed and replaced with the phrase "EXPLOSIVES 1.1 or EXPLOSIVES 1.2 (EXPLOSIVES A) placards".

#### § 174.115 [Amended]

- 41. In § 174.115, in the section heading and paragraphs (a), (b) introductory text, and (b)(3), the phrase "Class C explosives" would be removed and replaced with the phrase "Division 1.4 (Class C explosive) materials" each place it appears.
- 42. The subpart F heading would be revised to read as follows:

# Subpart F—Detailed Requirements for Class 2 (Gases) Materials

#### § 174.200 [Amended]

- 43. In § 174.200, the following changes would be made:
- a. In paragraphs (a) and (b), the phrase "Flammable gases" would be removed and replaced with the phrase "Division 2.1 (flammable gas) materials" and in paragraph (c) introductory text the phrase "flammable gases" would be removed and replaced with the phrase "Division 2.1 (flammable gas) materials".
- b. In paragraph (c)(4), the phrase "over 130 degrees F" would be removed and replaced with the phrase "over 54°C (130°F)".

#### §174.201 [Amended]

- 44. In § 174.201, the following changes would be made:
- a. In the section heading, the phrase "Compressed gas" would be removed and replaced with the phrase "Class 2 (gases) material".
- b. In paragraphs (a) introductory text and (c), the phrase "compressed gases" would be removed and replaces with the phrase "Class 2 (gases) materials".

#### §174.204 [Amended]

- 45. In § 174.204, the following changes would be made:
- a. In paragraph (a) introductory text, the phrase "compressed gas" would be removed and replaced with the phrase "Class 2 (gases) material".
- b. In paragraph (a)(2)(i), the phrase "flammable cryogenic liquid" would be removed and replaced with the phrase "Division 2.1 (flammable cryogenic liquid) materials".

## § 174.208 [Amended]

- 46. In § 174.208, the following changes would be made:
- a. In paragraph (a), the phrase
  "flammable liquid or gas" would be
  removed and replaced with the phrase
  "Class 3 (flammable liquid) materials or
  Division 2.1 (flammable gas) materials".
- b. In paragraph (b), the phrase "poisonous liquid, gas, or solid" would be removed and replaced with the phrase "Division 6.1 (poisonous) or Division 2.3 (poisonous gas) materials".

## § 174.280 [Amended]

- 47. In § 174.280, the following changes would be made:
- a. In the section heading, the phrase "Poison gases" would be removed and replaced with the phrase "Division 2.3 (poisonous gas) materials".
- b. In § 174.280, the phrase "poison label" would be removed and replaced with the phrase "POISON GAS label".

#### §174.290 [Amended]

- 48. In §174.290, the following changes would be made:
- a. In the section heading and paragraphs (a), (b) introductory text, (b)(2), (c), (d), (f), (g), (h), and (i), the phrase "Poison A" would be removed and replaced with the phrase "Division 2.3 (PG I, Zone A; poisonous gas) and Division 6.1 (PG I, Zone A; poisonous liquid) materials".
- b. In paragraph (b)(1), the phrase "DOT-5A or WD-5A1 metal drums" would be removed and replaced with the phrase "UN1N1 or UN1N2 metal drums, or equivalent military specification metal drums" and footnote 1 would be removed.
- 49. The subpart G heading would be revised to read as follows:

# Subpart G—Detailed Requirements for Class 3 (Flammable Liquid) Materials

## § 174.300 [Amended]

- 50. In § 174.300, the following changes would be made:
- a. In paragraph (a), the phrase "Flammable liquids" would be removed and replaced with the phrase "Class 3 (flammable liquid) materials" and in

- paragraph (c) introductory text. the phrase "flammable liquids" would be removed and replaced with the phrase "Class 3 (flammable liquid) materials".
- b. In paragraph (b), the phrase "flammable liquid" would be removed and replaced with the phrase "Class 3 (flammable liquid) materials".
- c. In paragraph (c)(4), the phrase "over 130 degrees F" would be removed and replaced with the phrase "over 54°C (130°F)".
- d. Paragraph (d) would be removed and paragraph (e) would be redesignated as paragraph (d).
- e. In newly designated paragraph (d), the phrase "flammable liquids" would be removed and replaced with the phrase "Class 3 (flammable liquid) materials".

## § 174.304 [Amended]

- 51. In § 174.304, in the section heading the phrase "Flammable liquide" would be removed and replaced with the phrase "Class 3 (flammable liquid) materials" and in the text the phrase "flammable liquid" would be removed and replaced with the phrase "Class 3 (flammable liquid) material".
- 52. In § 174.380, the section heading would be revised to read as follows:
- § 174.380 Class 3 (flammable fiquid) materials, with a subsidiary hazard of Division 6.1 (poisonous) materials, with foodstuffs.

#### § 174.380 [Amended]

- 53. In § 174.380, the phrase "flammable liquid" would be removed and replaced with the phrase "Class 3 (flammable liquid) materials".
- 54. The subpart H heading would be revised to read as follows:

# Subpart H—Detailed Requirements for Class 4 (Flammable Solid) Materials

#### § 174.410 [Amended]

- 55. In § 174.410, paragraph (d), the phrase "Specification 15A or 12C" would be removed and replaced with the phrase "UN4C1, UN4C2, or UN4C" and the phrase "(§§ 178.168, 178.206 of this subchapter)" would be removed.
- 56. Section 174.430 would be added to read as follows:

# § 174:430 Special handling requirements for Division 4.2 (pyroforic liquid) materials.

Cylinders containing Division 4.2 (pyroforic liquid) materials, unless packed in strong box or case and secured therein to protect valves, must be loaded with all valves and safety relief devices in the vapor space. All cylinders must be secured so that no shifting occurs in transit.

57. In § 174.480, the section heading would be revised to read as follows:

§ 174.480 Class 4 (flammable solid) materials, with a subsidiary hazard of Division 6.1 (poisonous) materials, with foodstuffs.

## §174.480 [Amended]

58. In § 174.480, the phrase "flammable solid material" would be removed and replaced with the phrase "Class 4 (flammable solid) materials".

59. The subpart I heading would be revised to read as follows:

# Subpart i—Detailed Requirements for Division 5.1 (Oxidizing) Materials

## § 174.510 [Amended]

60. In § 174.510, the phrase "listed in § 173.182(b) of this subchapter" would be removed.

61. In § 174.580, the section heading would be revised to read as follows:

# § 174.580 Division 5.1 (oxidizer) materials, with a subsidiary hazard of Division 6.1 (poisonous materials), with foodstuffs.

## § 174.580 [Amended]

62. In § 174.580, the phrase "oxidizer material" would be removed and replaced with the phrase "Division 5.1 (oxidizer) material".

63. The subpart J heading would be revised to read as follows:

# Subpart J—Detailed Requirements for Division 6.1 (Poisonous) Materials

## § 174.600 [Amended]

64. In § 174.600, the phrase "Poison A" would be removed and replaced with the phrase "Division 2.3 [PG I, Zone A: poisonous gas] or Division 6.1 [PG I, Zone A: poisonous liquid], Packing Group I, materials" in the section heading and regulatory text.

## § 174.615 [Amended]

65. In § 174.615, the following changes would be made:

a. In paragraph (a), the phrase "Paris green" would be removed and replaced with the phrase "copper acetoarsenite (Paris green)".

b. In paragraphs (a) and (b), the phrase "poisonous materials" would be revised to read "Division 6.1 (poisonous) materials" each place it appears.

66. In § 174.680, the section heading would be revised to read as follows:

# § 174.680 Division 6.1 (poisonous) materials with foodstuffs.

67. The subpart K heading would be revised to read as follows:

# Subpart K—Detailed Requirements for Class 7 (Radioactive) Materials

## § 174.700 [Amended]

68. In § 174.700, the following changes would be made:

a. In paragraphs (c), (d), (e)(2), and (e)(3), the phrase "radioactive material" would be removed and replaced with the phrase "Class 7 (radioactive) material" each place it appears.

b. In the section heading and paragraphs (b), (c), (e) introductory text, (e)(1), and (f), the phrase "radioactive materials" would be removed and replaced with the phrase "Class 7 (radioactive) materials".

c. In paragraph (c), the phrase "closer than three feet" would be removed and replaced with the phrase "closer than 1 meter (3.3 feet)", and the phrase "nor closer than 15 feet" would be removed and replaced with the phrase "nor closer than 4.5 meters (15 feet)".

d. In paragraph (d), the phrase "at least 20 feet" would be removed and replaced with the phrase "at least 6 meters (20 feet)".

e. In paragraph (e) introductory text, the phrase "weighing 15,000 pounds" would be removed and replaced with the phrase "weighing 6,805 kg (15,002 pounds)".

f. In paragraph (e)(1), the phrase "weighing 5,000 pounds" would be removed and replaced with the phrase "weighing 2,268 kg (5,000 pounds)".

g. In paragraph (e)(3), the phrase "weighing 700 pounds" would be removed and replaced with the phrase "weighing 315 kg (694.5 pounds)".

## § 174.715 [Amended]

69. In § 174.715, the following changes would be made:

a. In paragraphs (a) and (b), the phrase "radioactive materials" would be removed and replaced with the phrase "Class 7 (radioactive) materials".

b. In paragraph (b), the phrase "at 3 feet" would be removed and replaced with the phrase "at 1 meter (3.3 feet)" and the phrase "3 inches high" would be removed and replaced with the phrase "8 cm (3.2 inches) high".

## § 174.750 [Amended]

70. In § 174.750, the following changes would be made:

a. In paragraphs (a) and (b), the phrase "radioactive materials" would be removed and replaced with the phrase "Class 7 (radioactive) materials" each place it appears.

b. In paragraph (b), the phrase "radioactive material" would be removed and replaced with the phrase "Class 7 (radioactive) material".

71. The subpart L heading would be revised to read as follows:

# Subpart L—Detailed Requirements for Class 8 (Corrosive) Materials

## § 174.800 [Amended]

72. In § 174.800, the following changes would be made:

a. In the section heading, the phrase "corrosive materials" would be revised to read "Class 8 (corrosive) materials".

b. In paragraph (a), the phrase "corrosive liquids" would be revised to read "Class 8 (corrosive) materials".

c. In paragraph (a), the first and last sentences would be removed and the designation (a) would be removed.

d. Paragraphs (b) and (c) would be removed.

#### § 174.810 [Amended]

73. In § 174.810, the following changes would be made:

a. In paragraph (a), the phrase "and may not be loaded or stored with explosives" would be removed.

b. In paragraph (b), the reference "§ 173.258" would be removed and replaced with the reference "§ 173.159".

## § 174.812 [Removed and Reserved]

74. Section 174.812 would be removed and reserved.

75. The subpart M heading would be revised to read as follows:

## Subpart M—Detailed Requirements for Class 9 (Miscellaneous Hazardous) Materials

## § 174.840 [Amended]

76. In § 174.840, the reference "§ 173.1090" would be removed and replaced with "§ 173.216".

## PART 175-CARRIAGE BY AIRCRAFT

77. The authority citation for part 175 would continue to read as follows:

Authority: 49 U.S.C. App. 1803, 1804, 1807, 1808; 49 CFR part 1.

## § 175.10 [Amended]

78. In § 175.10, the following changes would be made:

a. In paragraph (a)(4)(i), the phrase "75 ounces (net weight ounces and fluid ounces)" would be removed and replaced with the phrase "2.2 kg (77.6 net weight ounces) or 2.2 liters (74.6 fluid ounces)".

b. In paragraph (a)(4)(ii), the phrase "16 fluid ounces or 1 pound" would be removed and replaced with the phrase "475 ml (16 fluid ounces) or 0.5 kg (1.1 pound)".

c. In paragraph (a)(8), the phrase "radioactive material" would be

removed and replaced with the phrase "Class 7 (radioactive materials".

d. In paragraph (a)(13), the phrase "(dry ice)" would be removed and replaced with the phrase "(dry ice; i.e., Class 9 material)"; the phrase "5 pounds" would be removed and replaced with the phrase "2.3 kg (5.07 pounds)" both places it appears; and the references "§ 173.615(a)" would be removed and replaced with the phrase "§ 173.217".

e. In paragraph (a)(14)(vii), the phrase "ten feet" would be removed and replaced with the phrase "3 meters (9.8

feet)".

f. In paragraph (a)(17), the phrase "(dry ice)" would be removed and replaced with the phrase "(dry ice; i.e., Class 9 material)" and the phrase "4 pounds" would be removed and replaced with the phrase "2 kg [4.4 pounds]".

g. In paragraph (a)(19), the reference "§ 173.260(d)" would be removed and replaced with the reference

"§ 173.159(d)".

#### § 175.25 [Amended]

79. In § 175.25, in paragraph (a)(1), the phrase "75 ounces" would be removed and replaced with the phrase "2.2 kg (77.6 ounces)".

#### § 175.30 [Amended]

80. In § 175.30, the following changes would be made:

a. In paragraph (c)(2), the phrase "radioactive materials" would be removed and replaced with the phrase "Class 7 (radioactive) materials".

b. In paragraph (d)[2], the phrase "(carbon dioxide, solid)" would be removed and replaced with the phrase "(carbon dioxide, solid, Class 9 materials)".

## § 175.33 [Amended]

81. In § 175.33, paragraphs (a)(3) and (a)(6), the phrase "radioactive materials" would be removed and replaced with the phrase "Class 7 (radioactive) materials".

## § 175.45 [Amended]

82. In § 175.45, the following changes would be made:

a. In paragraph (a)(2), the phrase "radioactive materials" would be removed and replaced with the phrase "Class 7 (radioactive) materials".

b. In paragraph (a)(3), the phrase "etiologic agents" would be removed and replaced with the phrase "Division 6.2 (etiologic or infectious substance) materials" both places it appears.

## § 175.75 [Amended]

83. In § 175.75, the following changes would be made:

a. In paragraph (a)(2), the phrase "50 pounds net weight" would be removed and replaced with the phrase "25 kg (55 pounds) net weight"; the phrase "150 pounds net weight" would be removed and replaced with the phrase "75 kg (165 pounds) net weight"; and the phrase "nonflammable compressed gas" would be removed and replaced with the phrase "Division 2.2 (nonflammable compressed gas) materials".

b. In paragraphs (a)(3) introductory text and (a)(3)(ii), the phrase "radioactive materials" would be removed and replaced with the phrase "Class 7 (radioactive) materials".

c. In paragraph (b), the phrase "ORM material" would be removed and replaced with the phrase "Class 9 (miscellaneous hazardous) materials. ORM-D or ORM-E materials".

## § 175.81 [Amended]

84. In § 175.81, paragraph (b), the phrase "radioactive materials" would be removed and replaced with the phrase "Class 7 (radioactive) materials".

## § 175.85 [Amended]

85. In § 175.85, the following changes would be made:

a. In paragraph (c)(1)(i), the phrase "Radioactive (ICAO Class 7) materials" would be removed and replaced with the phrase "Class 7 (radioactive) materials".

b. In paragraph (c)(1)(ii), the phrase "Poison B (ICAO Division 6.1) liquids and solids" would be removed and replaced with the phrase "Division 6.1 (poisonous or tear gas substances) materials".

c. Paragraphs (c)(1)(iii) and (c)(1)(vii) would be removed and paragraphs (c)(1)(iv) through (c)(1)(vi) would be redesignated as (c)(1)(iii) through (c)(1)(v).

d. In newly designated paragraph (c)(1)(iii), the phrase 'Etiologic (ICAO Division 6.2) agents" would be removed and replaced with the phrase "Division 6.2 (etiologic or infectious substance) materials".

e. In newly designated paragraph (c)(1)(iv), the phrase "Flammable liquids" would be removed and replaced with the phrase "Class 3 (flammable liquid) materials" and the phrase "73 °F. (23 °C.)" would be removed and replaced with the phrase "23 °C (73 4 °F)"

86. In § 175.85, newly designated paragraph (c)(1)(v) would be revised to read as follows:

## § 175.85 Cargo location.

(c) \* \* \*

(1) \* \* \*

(v) Class 9 (miscellaneous hazardous) materials, ORM-D and ORM-E materials.

## § 175.90 [Amended]

87. In § 175.90, paragraph (d) introductory text, the phrase "an etiologic agent" would be removed and replaced with the phrase "a Division 6.2 (etiologic or infectious substance) material".

## § 175.305 [Amended]

88. In § 175.305, paragraph (a), the reference "§ 173.120" would be removed and replaced with the reference "§ 173.220".

## § 175.310 [Amended]

89. In § 175.310, the following changes would be made:

a. In the introductory paragraph, the phrase "more than 20 gallons" would be removed and replaced with the phrase "more than 76 liters (20.1 gallons)".

b. In paragraph (c)(1), the phrase "5 gallons capacity" would be removed and replaced with the phrase "20 liters (5.3 gallons) capacity"; the phrase "DOT Specification 12B fiberboard box" would be removed and replaced with the phrase "UN4G fiberboard box"; the phrase "DOT Specification 15A, 15B, 15C, 16A, 19A or 19B wooden box" would be removed and replaced with the phrase "UN4C1 wooden box"; and the phrase "at least one-half inch thickness" would be removed and replaced with the phrase "at least 1.3 cm (0.5 inch) thickness".

c. In paragraph (c)(2), the phrase "10 gallons capacity" would be removed and replaced with the phrase "40 liters (10.6 gallons) capacity"; the phrase "DOT Specification 15A, 15B, 15C, 16A. 19A or 19B wooden box" would be removed and replaced with the phrase "UN4C1 wooden box"; and the phrase "at least one-half inch thickness" would be removed and replaced with the phrase "at least 1.3 cm (0.5 inch) thickness".

d. In paragraph (c)(3), the phrase "DOT Specification 17E container" would be removed and replaced with the phrase "UN1A1 container" and the phrase "5 gallons capacity" would be removed and replaced with the phrase "20 liters (5.3 gallons) capacity".

90. In § 175.320, paragraph (a), the table would be revised to read as follows:

# § 175.320 Cargo aircraft only; only means of transportation.

(a) \* \* \*

Material	Class	Conditions
Detonators and detonating primer  Detonators and detonating primers	Division 1.1 or 1.2 (Class A) explosives Division 1.4 (Class C) explosives	Permitted only when no other harzardous material is aboard the aircraft.  With the exception of Division 1.1 or 1.2 detonators and detonating primers, permitted only when there are no Division 1.1 or 1.2 (Class A) explosives aboard aircraft.
Fuel, aviation, turbine engine; methyl alco- hol; or toluene.	Class 3 (flammable liquid)	Permitted in metal drums authorized for Packing Group t or II liquid hazardous materials having rated capacities or 220 liters (58.1 gallons) or less. May not be transported in the same aircraft with Class 1 (explosive), Class 5 (oxidizing), or Class 8 (corrosive) materials. Permitted in installed tanks each having a capacity of more than 450 literu (118.9 gallons) subject to the conditions specified in paragraph (c) of this section.
Gasoline	Class 3 (flammable liquid)	Permitted in metal drums having rated capacities of 220 liters (58.11 gallons) or less. May not be transported in the same aircraft with materials classed as Class 1 (explosive), Class 5 (oxidizing), or Class 6 (corrosive) materials. Permitted in installed tanks each having a capacity of 450 liters (118.9 gallons). Subject to the conditions specified in paragraph (c) of this section.
High explosives	Division 1.1 or 1.2 (Class A) explosives	Limited to Class 1 (explosive) material to be used for blasting. Permitted only when no other cargo is aboard the aircraft or when being transported in the same aircraft with an authorized shipment of any one or more of any of the following materials to be used for blasting:  Ammonium nitrate-fuel oil mixures. Blasting agent n.o.s.  Delonating cord.
OH n.o.s.; petroleum oil or petroleum oil, n.o.s.	Class 3 (flammable liquid)	Propellant explosive (solid) (Division 1.3) (water gets only) Propellant explosive (liquid) (Division 1.3) (water gets only) Permitted in metal drums having rated capacities of 220 liters (58.1) gallons) or less. May not be transported in the same aircraft with
		materials classed as Class 1 (explosive), Class 5 (oxidizing), or Class 8 (corrosive) materials. Permitted in installed tanks each having a capacity of 450 liters (118.9 gallons). Subject to the conditions specified in paragraph (c) of this section.
Combustible liquid n.o.s.	Class 3 (combustible)	Permitted in installed tanks each having a capacity of more than 450 liters (118.9 gallons) subject to the conditions specified in paragraph (c) of this section.

## § 175.320 [Amended]

91. In § 175.320, the following changes would be made:

a. In paragraph (b)(6), the phrase "Class A explosives" would be removed and replaced with the phrase "Division 1.1 or 1.2 (explosive) materials".

b. In paragraph (b)(9), the phrase "within 50 feet" would be removed and replaced with the phrase "within 15 meters (49.2 feet)".

c. In paragraph (c) introductory text, the phrase "flammable liquids and combustible liquids" would be removed and replaced with the phrase "Class 3 (flammable and combustible liquid) materials" and the phrase "110 gallons" would be removed and replaced with the phrase "420 liters (110.9 gallons)".

d. In paragraph (c)(4)(iii), the phrase "flammable or combustible liquid" would be removed and replaced with the phrase "Class 3 (flammable or combustible liquid) materials" both places it appears and the phrase "within 50 feet" would be removed and replaced with the phrase "15 meters (49.2 feet)."

92. In § 175.630, the section heading would be revised to read as follows:

§ 175.630 Special requirements for Division 6.1 (poisonous or irritating) materials and Division 6.2 (etiologic or infectious substances) materials.

## § 175.630 [Amended]

93. In § 175.630, the following changes would be made:

a. In paragraph (a), the phrase "ETIOLOGIC AGENT label" would be removed and replaced with the phrase "INFECTIOUS SUBSTANCE label" and the phrase "poisons or etiologic agents" would be removed and replaced with the phrase "Division 6.1 (poisonous or irritating) materials or Division 6.2 (etiologic or infectious substance) materials" both places it appears.

b. In paragraph (b), the phrase "such poisons" would be removed and replaced with the phrase "such Division 6.1 (poisonous) materials".

94. In § 175.640, the section heading would be revised to read as follows:

# § 175.640 Special requirements for Class 9 (miscellaneous hazardous) material.

## § 175.640 [Amended]

95. In § 175.640, the reference "§ 173.1090' would be removed and replaced with "§ 173.216".

## § 175.700 [Amended]

96. In § 175.700, the following changes would be made:

a. In the section heading and

paragraph (b), the phrase "radioactive materials" would be removed and replaced with the phrase "Class 7 (radioactive) materials" each place it appears.

b. In paragraph (c), the phrase "radioactive material" would be removed and replaced with the phrase "Class 7 (radioactive) material".

## § 175.701 [Amended]

97. In § 175.701, in the section heading and paragraphs (b)(1) and (b)(2), the phrase "radioactive materials" would be removed and replaced with the phrase "Class 7 (radioactive) materials" each place it appears.

## § 175.702 [Amended]

98. In § 175.702, the following changes would be made:

a. In the section heading and paragraphs (b)(2)(i) and (b)(2)(iv), the phrase "radioactive materials" would be removed and replaced with the phrase "Class 7 (radioactive) materials"

b. In paragraph (a) and (b)(2)(iii), the phrase "20 feet (6 meters)" would be removed and replaced with the phrase "6 meters (20 feet)".

c. In paragraph (b)(2)(i), the phrase "30 feet (9 meters)" would be removed and replaced with the phrase "9 meters (29.5 feet)".

## § 175.703 [Amended]

99. In § 175.703, the following changes would be made:

a. In the section heading and paragraphs (a), (b), (c) introductory text, and (d)(3), the phrase "radioactive materials" would be removed and replaced with the phrase "Class 7 (radioactive) materials".

b. In paragraph (c)(1), the phrase "radioactive material" would be removed and replaced with the phrase "Class 7 (radioactive) material".

## § 175.705 [Amended]

100. In § 175.705, the section heading and paragraph (a), the phrase "radioactive materials" would be removed and replaced with the phrase "Class 7 (radioactive) materials" each place it appears.

# PART 177—CARRIAGE BY PUBLIC HIGHWAY

101. The authority citation for part 177 would continue to read as follows:

Authority: 49 U.S.C. App. 1803, 1804, 1805, 49 CFR part 1.

## § 177.806 [Amended]

102. In § 177.806, paragraph (b), the phrase "radioactive materials" would be removed and replaced with the phrase "Class 7 (radioactive) materials".

## § 177.810 [Amended]

103. In § 177.810, the phrase "radioactive materials" would be removed and replaced with the phrase "Class 7 (radioactive) materials" both places it appears.

## § 177.811 [Amended]

104. In § 177.811, paragraph (a), the phrase "(other than explosives)" would be removed and replaced with the phrase "(other than Class 1 (explosive) materials)".

## § 177.816 [Amended]

105. In § 177.816, paragraphs (a) and (b)(2), the phrase "flammable cryogenic liquid" would be removed and replaced with the phrase "Division 2.1 (flammable cryogenic liquid) materials".

## § 177.818 [Amended]

106. In § 177.818, the following changes would be made:

a. In the section heading, the phrase "flammable cryogenic liquids" would be removed and replaced with the phrase "Division 2.1 (flammable cryogenic liquid) materials".

b. In paragraph (a) introductory text, the phrase "flammable cryogenic liquid" would be removed and replaced with the phrase "Division 2.1 (flammable cryogenic liquid) material", and the

phrase "exceeding 125 gallons" would be removed and replaced with the phrase "exceeding 450 liters (118.9 gallons)".

## § 177.821 [Amended]

107. In § 177.821, the following changes would be made:

a. In paragraph (d), the phrase "high explosive" would be removed and replaced with the phrase "Division 1.1 or 1.2 (high explosive) material" both places it appears and the phrase "the explosive" would be removed and replaced with the phrase "the Class 1 (explosive) material" both places it appears.

b. In paragraph (f), the phrase "100 pounds net weight" would be removed and replaced with the phrase "45 kg (99.2 pounds) net weight"; in the first sentence of paragraph (f), the phrase "flammable solid" would be removed and replaced with the phrase "Class 4 (flammable solid) material"; and the phrase "not exceed 8 pounds" would be removed and replaced with the phrase "not exceed 3.6 kg (7.9 pounds)".

## § 177.825 [Amended]

108. In § 177.825, the following changes would be made:

a. In the section heading and paragraphs (a) introductory text, (b) introductory text, (c) introductory text, (d) introductory text, (d) introductory text, (d)(1)(i), (d)(1)(ii), and (d)(2)(iv), the phrase "radioactive materials" would be removed and replaced with the phrase "Class 7 (radioactive) materials".

b. In paragraphs (a) introductory text, (f) introductory text, and (f)(3), the phrase "radioactive material" would be removed and replaced with the phrase "Class 7 (radioactive) material".

## § 177.826 [Amended]

109. In § 177.826, the following changes would be made:

a. In the section heading and paragraphs (b)(2) and (b)(3), the phrase "flammable cryogenic liquids" would be removed and replaced with the phrase "Division 2.1 (flammable cryogenic liquid) materials".

b. In paragraphs (a) and (b)(3), the phrase "flammable cryogenic liquid" would be removed and replaced with the phrase "Division 2.1 (flammable cryogenic liquid) material".

## § 177.834 [Amended]

110. In § 177.834, the following changes would be made:

a. In paragraph (a), the phrase "flammable liquid, compressed gas, corrosive material, poisonous material, or radioactive material" would be removed and replaced with the phrase

"Class 3 (flammable liquid), Class 2 (gases), Class 8 (corrosive), Division 6.1 (poisonous), or Class 7 (radioactive) material".

b. In paragraph (c), the phrase "explosive, flammable liquid, flammable solid, oxidizing material, or flammable compressed gas" would be removed and replaced with the phrase "Class 1 (explosive), Class 3 (flammable liquid), Class 4 (flammable solid), Class 5 (oxidizing), or Division 2.1 (flammable gas) materials".

c. In paragraph (d), the phrase "explosive, flammable liquid, flammable solid oxidizing material, or flammable compressed gas" would be removed and replaced with the phrase "Class 1 (explosive), Class 3 (flammable liquid), Class 4 (flammable solid), Class 5 (oxidizing), or Division 2.1 (flammable gas) materials".

d. In paragraph (f), the phrase "any explosive" would be removed and replaced with the phrase "any Class 1 (explosive) material".

e. In paragraph (g), the phrase "explosives, flammable liquids, flammable solids, oxidizing materials, corrosive materials, compressed gases, and poisonous liquids or gases" would be removed and replaced with the phrase "Class 1 (explosive), Class 3 (flammable liquid), Class 4 (flammable solid), Class 5 (oxidizing), Class 8 (corrosive), Class 2 (gases) and Division 6.1 (poisonous) materials".

f. In paragraph (I)(1), the word "explosives" would be removed and replaced with the phrase "Class 1 (explosive) materials" both places it appears.

g. In paragraphs (1)(2)(i) introductory text and (1)(2)(iii)(A) introductory text, the phrase "flammable liquid or flammable gas" would be removed and replaced with the phrase "Class 3 (flammable liquid) or Division 2.1 (flammable gas) materials" and in paragraph (1)(2)(iii)(B) introductory text, the phrase "Flammable liquid or flammable gas" would be replaced with "Class 3 (flammable liquid) or Division 2.1 (flammable gas) materials".

h. In paragraph (1)(2)(i)(B), the phrase "130 °F. (54 °C)" would be removed and replaced with the phrase "54 °C (130 °F)", and the phrase "60 °F. (15.6 °C.)" would be removed and replaced with the phrase "16 °C (60.8 °F)".

i. In paragraph (i)(2)(iii)(A)(4), the phrase "130 °F.(54 °C.)" would be removed and replaced with the phrase "54 °C (130 °F)".

#### § 177.835 [Amended]

111. In § 177.835, the following changes would be made:

a. In paragraph (c)(4)(i), the phrase "Initiating explosive" would be removed and replaced with the phrase "Substances, explosive, n.o.s., Class 1.1A (explosive) material (Initiating explosive)"

 b. In paragraphs (g) introductory text, (g)(2)(i), and (j), the phrase "class A or class B explosive" would be removed and replaced with the phrase "Division -1.1, 1.2, or 1.3 (Class A or Class B

explosive) material"

c. In paragraph (f), the phrase "class A or class B explosives" would be removed and replaced with the phrase "Division 1.1, 1.2, or 1.3 (Class A or Class B explosive) materials".

 d. In paragraph (c) introductory text, the phrase "Class A explosives" would be removed and replaced with the phrase "Division 1.1 or 1.2 (Class A explosive) materials".

e. In paragraph (g) introductory text, the phrase "class C explosive" would be removed and replaced with the phrase "Division 1.4 (Class C explosive)

material".

f. In the section heading and paragraphs (c) introductory text, (f), and (i), the word "Explosives" would be removed and replaced with the phrase "Class 1 (explosive) materials" each place it appears.

g. In paragraphs (a), (b) introductory text, (b)(1), (e), (f), (h), (j), (k), and (m), the word "explosives" would be removed and replaced with the phrase "class 1 (explosive) materials" each

place it appears.

h. In paragraphs (e), (i), (k), and (m), the word "explosive" would be removed and replaced with the phrase "Class 1 (explosive) material" each place it appears.

i. In paragraph (c)(4)(ii), the phrase " radioactive materials" would be removed and replaced with the phrase "Class 7 (radioactive) materials".

j. In paragraph (c)(4)(iii), the phrase "Class A or B poisons" would be removed and replaced with the phrase "Division 2.3 (poisonous gas) or Division 6.1 (poisonous) materials"

k. In paragraphs (g)(2) introductory text and (g)(3)(i), the references "§ 173.103(d)" and "§ 173.66" would be removed and replaced with the reference "§ 173.63".

l. In paragraph (g)(2)(ii), the phrase "24 inches" would be removed and replaced with the phrase "61 cm (24 inches]".

m. In paragraph (h), the phrase "other than as defined in § 173.53(e) of this subchapter," would be removed.

n. In paragraph (k), the phrase "other than as defined in § 173.53(e) of this chapter," would be removed.

o. In paragraph (m), the phrase "as defined in § 173.53(e) of this subchapter," would be removed.

p. In paragraph (k), the phrase "900 quarts" would be removed and replaced with the phrase "850 liters (898.2 quarts)"; the phrase "10 quarts" would be removed and replaced with the phrase "9.5 liters (10 quarts)"; and the phrase "7,500 pounds" would be removed and replaced with the phrase "3,400 kg (7,495.7 pounds)".

#### § 177.836 [Amended]

112. In § 177.836, the word "explosive" would be removed and replaced with the phrase "Class 1 (explosive) material".

#### § 177.837 [Amended]

113. In § 177.837, the following changes would be made:

a. In the section heading, the phrase "Flammable liquids" would be removed and replaced with the phrase "Class 3 (flammable liquid) materials".

b. In paragraph (b), the phrase "flammable liquids" would be removed and replaced with the phrase "Class 3 (flammable liquid) materials"

c. In paragraphs (a) and (b), the phrase "flammable liquid" would be removed and replaced with the phrase 'Class 3 (flammable liquid) material".

d. Paragraph (d) would be removed and paragraph (e) would be redesignated as paragraph (d).

e. In newly designated paragraph (d) introductory text, the phrase "flammable liquid" would be removed and replaced with the phrase "Class 3 (flammable liquid) material".

114. In § 177.838, the section heading would be revised to read as follows:

§ 177.838 Class 4 (flammable solid) materials, Class 5 (oxidizing) materials, and Division 4.2 (pyroforic liquid) materials.

## § 177.838 [Amended]

115. In § 177.838, the following changes would be made:

a. In paragraphs (a) and (b), the phrase "flammable solids or oxidizing materials" would be removed and replaced with the phrase "Class 4 (flammable solid) or Class 5 (oxidizing) materials" each place it appears.

b. In paragraph (c), the phrase "4 inches wide" would be removed and replaced with the phrase "10 cm (3.9 inches) wide" and the phrase "6 inches" would be removed and replaced with the phrase "15 cm (5.9 inches)".

c. In paragraph (e)(2), the phrase "Flammable liquides" would be removed and replaced with the phrase 'Class 3 (flammable liquid) materials"

d. In paragraph (f), the phrase "listed in § 173.182(b) of this subchapter" would be removed.

e. In paragraph (g), the phrase "not exceeding 100 pounds" would be removed and replaced with the phrase "not exceeding 45 kg (99.2 pounds)", the phrase "flammable solid" would be removed and replaced with the phrase "Class 4 (flammable solid) material", the phrase "not exceed 8 pounds" would be removed and replaced with the phrase "not exceed 3.6 kg (7.9 pounds)", the phrase "DOT-12A65, 12B65, or 12H65 fiberboard boxes" would be removed and replaced with the phrase "UN4G fiberboard boxes", and the phrase "not exceed 16 pounds" would be removed and replaced with the phrase "not exceed 7.28 kg (16.01 pounds)".

116. In § 177.838, a new paragraph (h) would be added to read as follows:

(h) Division 4.2 (pyroforic liquid) materials in cylinders. Cylinders containing Division 4.2 (pyroforic liquid) materials, unless packed in a strong box or case and secured therein to protect valves, must be loaded with all valves and safety relief devices in the vapor space. All cylinders must be secured so that no shifting occurs in transit.

## § 177.839 [Amended]

117. In § 177.839, the following changes would be made:

a. In the section heading and paragraphs (b) and (d), the phrases Corrosive liquids", "corrosive liquids", "Corrosives" and "corrosives" would be removed and replaced with the phrase "Class 8 (corrosive) materials" each place they appear.

b. In paragraph (a), the phrases "carboy or other" and "carboys or other" would be removed.

c. In paragraph (b), the phrases "Carbovs and", "carboys and", and "carboys or" would be removed.

## § 177.840 [Amended]

118. In § 177.840, the following changes would be made:

a. In the section heading, the phrase "Compressed gases" would be removed and replaced with the phrase "Class 2 (gases) materials".

b. In paragraphs (a) introductory text, (a)(1), and (b) introductory text, the phrase, "compressed gases" would be removed and replaced with the phrase "Class 2 (gases) materials"

c. In paragraph (d), the phrase "flammable compressed gas" would be removed and replaced with the phrase "Division 2.1. (flammable gas) material".

d. In paragraphs (h) introductory text. (i), and (i) introductory text, the phrase "flammable cryogenic liquid" would be removed and replaced with the phrase "Division 2.1 (flammable cryogenic liquid) material".

e. In paragraphs (h) introductory text, the phrase "exceeding 125 gallons" would be removed and replaced with the phrase "exceeding 450 liters (118.9 gallons)".

119. In § 177.841, the section heading would be revised to read as follows:

## § 177.841 Division 6.1 (poisonous or tear gas substances) and Division 2.3 (poisonous gas) materials.

#### § 177.841 [Amended]

120. In § 177.841, the following changes would be made:

- a. Paragraph (a)(1) would be removed, the text in paragraph (a)(2) would be added as the last sentence in paragraph (a) introductory text, and the designation (a)(2) would be removed.
- b. Paragraph (b) would be removed and reserved.
- c. In paragraph c, the phrase "Class A poison or irritating materials" would be removed and replaced with the phrase "Division 2.3 (poisonous gas) or Division 6.1 (poisonous or tear gas substances) materials".
- d. In paragraph (c), the phrase "Class A poison or irritating material" would be removed and replaced with the phrase "Division 2.3 (poisonous gas) or Division 6.1 (poisonous or tear gas substances) material".
- e. In paragraph (d) introductory text, the word "poisons" would be removed and replaced with the phrase "Division 6.1 (poisonous) materials".
- f. In paragraph (e), the phrase "labeled 'Poison', 'Poison gas', or 'Irritant' " would be removed and replaced with

the phrase "labeled 'POISON' or 'POISON GAS' ".

#### § 177.842 [Amended]

121. In § 177.842, the following changes would be made:

a. In the section heading, the phrase "Radioactive material" would be removed and replaced with the phrase "Class 7 (radioactive) material".

b. In paragraphs (b) and (f), the phrase "radioactive material" would be removed and replaced with the phrase "Class 7 (radioactive) material".

c. In paragraphs (a) and (e), the phrase "radioactive materials" would be removed and replaced with the phrase "Class 7 (radioactive) materials".

d. In paragraph (f), the phrase "at least 20 feet" would be removed and replaced with the phrase "at least 6 meters (20 feet)".

## § 177.843 [Amended]

122. In § 177.843, the following changes would be made:

a. In paragraph (a), the phrase "radioactive materials" would be removed and replaced with the phrase "Class 7 (radioactive) materials".

b. In paragraphs (b) and (c), the phrase "radioactive material" would be removed and replaced with the phrase "Class 7 (radioactive) material".

c. In paragraph (b), the phrase "3 feet" would be removed and replaced with the phrase "1 meter (3.3 feet)", and the phrase 1 "3 inches high" would be removed and replaced with the phrase "7.5 cm (3 inches) high".

123. In § 177.844, the section heading would be revised to read as follows:

## § 177.844 Class 9 (miscellaneous hazardous) materials.

#### § 177.844 [Amended]

124. In § 177.844, the reference "§ 173.1090" would be removed and replaced with the reference "§ 173.216".

125. § 177.848 would be revised to read as follows:

## § 177.848 Segregation of hazardous materials.

- (a) This section applies to materials which meet one or more of the hazard classes defined in this subchapter and are:
- (1) In packages which require labels in accordance with Part 172 of this subchapter.
- (2) In a compartment within a multicompartmented cargo tank; or
- (3) In a portable tank loaded in a transport vehicle or freight container.
- (b) In addition to the provisions of paragraph (d) of this section, when a transport vehicle is to be transported by vessel, other than a ferry vessel, hazardous materials on or within that vehicle shall be stowed and segregated in accordance with §§ 176.83 and 176.144 of this subchapter.
- (c) In addition to the provisions of paragraph (d) of this section, cyanides or cyanide mixtures shall not be loaded or stored with acids.
- (d) Hazardous materials shall not be loaded, transported, or stored together, except as provided in this section and in accordance with the following Table.

## SEGREGATION TABLE FOR HAZARDOUS MATERIALS

Class or division		Notes	1.1	1.3	1.4	1.5	1.6	2.1	2.2	2.3 gases pack- ing group I only	3	4.	4.2	4.3	5.1	5.2	6.1 liquids pack- ing group I only	7	8 l <del>iq</del> uids only
Explosives Explosives Explosives Explosives Extremely insensitive explosives Flammable gases	1.1 and 1.2 1.3 1.4 1.5 1.6 2.1 2.2	A			0		•	X X O X	×	x x o x	X X O X	×	XXOX O	X X O	X X X	× × ×	x o x o	x o	x x 0 x 0
Non-toxic, rion-flammable gases Poisonous gases: packing group I only. Flammable liquids	2.2 2.3 3 4.1 4.2	8 B	X X X	x x x	0	XXXX		0		X X	X O	x o	x o	x o	x o	x o	X X X		X O O X
Spontaneously combustible materials.  Dangerous when wet materials  Oxidizers  Organic peroxides  Poisonous liquids: packing group I only.	4.3 5.1 5.2 6.1	A, B B	X X X	X X X X	0	X X X		0000		X X	000 x	x	×	×	×	×	X X		x 0 0 x
Radioactive materials Corrosive liquids	7 8	8	X	×	0	X		0		x	0	0	x	x	0	0	×		

(e) Instructions for using the Segregation Table for Hazardous Materials set forth in paragraph (d) of this section are as follows:

(1) The letter "X" in the Table means that these materials shall not be loaded, transported, or stored together in the same transport vehicle or storage facility during the course of transportation.

(2) The letter "O" in the Table means that these materials shall not be loaded, transported, or stored together in the same transport vehicle or storage facility during the course of

- transportation, unless separated by a distance of 1.2 m (4 feet) in all directions.
- (3) The "\*" in the Table means that segregation among different Class 1 (explosive) materials is governed by the Compatibility Table in paragraph (f) of this section.
- (4) The notes in the second column of the Table mean the following:
- (i) "A" means that ammonium nitrate fertilizer may be loaded or stored with Division 1.1 (Class A explosive) materials.
- (ii) "B" means that the materials for which an "O" appears in the Table may be loaded and transported together if each class or division is separtely palletized at a minimum height of 10.6 cm (4 inches) off the floor of the transport vehicle and separated by a distance of 1.2 m (4 feet) in all directions.
- (f) Class 1 (explosive) materials shall not be loaded, transported, or stored together, except as provided in this section and in accordance with the following Table.

## COMPATIBILITY TABLE FOR CLASS 1 (EXPLOSIVE) MATERIALS

Å		1	ł	t i					<del></del>		<del></del>	N	
P P		1 X	x	X	×	x	x	x	x	x	x	Y	x
	X		х	X	x	X	X	x	X	X	X	l â	1
C	X	l x		2	2	X	x	x	X	l x	x	13	1
D	x	X	2	[ -	2	X	X	x	X	X	X	3	1
Ë	X	X	2	2	-	X	X	x	X	X	x	3	Ī
F .	×	X	×	×	x		X	x	x	l x	×	×	1
G	ix	X	×	Χ.	x	x	1	x	X	×	X	×	ı
· H	ĺχ	X	x	х	X	X	X	1	X	X	X	x	ł
<b>j</b>	X	X	X	X	x	X	X	x	1	l x	x	x	1
K ,	X	X	X	X	X	X	X	X	X	1	l x	X	1
L .	×	X	X	X	X	X	X	x	X	x	1	x	1)
N	x	Х	3	3	3	X	X	X	X	x	x	1	1
S	×	1	-	] -		1	1	l	1	1	ĺ x	1	

- (g) Instructions for using the Compatibility Table for class 1 (explosive) materials set forth in paragraph (f) of this section are as follows:
- (1) The letter "X" in the Table means that explosives of different compatibility groups shall not be carried on the same transport vehicle.
- (2) The notes in the Table mean the following:
- (i) "1" means an explosive from compatibility group L shall only be carried on the same transport vehicle with an identical explosive.
- (ii) "2" means any combination of explosives from compatibility group C, D, or E is assigned to compatibility group E.
- (iii) "3" means any combination of explosives from compatibility group C. D, or E with those in compatibility group N is assigned to compatibility group D.
- (h) With one exception, explosives of the same compatibility group but of different divisions may be transported together, provided that the whole shipment is handled and transported as though its entire contents were of the lower division. For example, a mixed shipment of Division 1.2 (Class A explosive) materials and Division 1.4 (Class C explosive) materials, both of compatibility group D, must be handled and transported as Division 1.2 (Class A

explosive) materials. However, when Division 1.5 (blasting agent) materials, compatibility group D, are transported in the same freight container as Division 1.2 (Class A explosive) materials, compatibility group D, the shipment must be handled and transported as Division 1.1 (Class A explosive) materials, compatibility group D.

## § 177.853 [Amended]

128. In § 177.853, paragraph (c), the word "explosives" would be removed and replaced with the phrase "Class 1 (explosive) materials" each place it appears.

#### § 177.854 [Amended]

127. In § 177.854, the following changes would be made:

a. In paragraph (f) introductory text, the phrase "flammable liquids, flammable solids, oxidizing materials, corrosive materials, compressed gases, or poisons" would be removed and replaced with the phrase "Class 3 (flammable liquid), Class 4 (flammable solid), Class 5 (oxidizing), Class 8 (corrosive), Class 2 (gases), or Division 6.1 (poisonous) materials".

b. In paragraph (f)(1), the phrase "flammable liquids or flammable compressed gases and not transporting explosives, Class A, or Class B" would be removed and replaced with the phrase "Class 3 (flammable liquid) or

- Division 2.1 (flammable gas) materials and not transporting Division 1.1, 1.2, or 1.3 (Class A or B explosive) materials".
- c. In paragraph (f)(2), the phrase "flammable liquids or flammable compressed gases" would be removed and replaced with the phrase "Class 3 (flammable liquid) or Division 2.1 (flammable gas) materials", and the phrase "explosives Class A or Class B" would be removed and replaced with the phrase "Division 1.1, 1.2, or 1.3 (explosive) materials".
- d. In paragraph (g)(2)(iv), the phrase "explosives A or B. flammable liquids or flammable gases" would be removed and replaced with the phrase "Division 1.1, 1.2, or 1.3 (Class A or B explosive), Class 3 (flammable liquid), or Division 2.1 (flammable gas) materials".
- e. In paragraph (h), the phrase "flammable liquid or poisonous liquid" would be removed and replaced with the phrase "Class 3 (flammable liquid) or Division 6.1 (poisonous liquid) material".

## § 177.855 [Amended]

128. In § 177.855, the following changes would be made:

a. In the section heading and paragraphs (a), (b), (c), and (f), the word 'explosives" would be removed and replaced with the phrase "Class 1

(exlosive) materials" both places it

b. In paragraphs (c) and (e), the word "Explosives" would be removed and replaced with the phrase "Class 1 (explosive) materials" each place it appears.

c. In paragraphs (a), (b), (c), and (f), the word "explosive" would be removed and replaced with the phrase "Class 1 (explosive) material".

d. In paragraph (a), the phrase "200 feet" would be removed and replaced with the phrase "61 meters (200.1 feet)"

both places it appears.

e. In paragraph (d), Note 1, the phrase "1 ounce" would be removed and replaced with the phrase "30 grams (1.1 ounce)"; the phrase 7½ fluid ounces" would be removed and replaced with the phrase "222 ml (7.5 fluid ounces); the phrase "2 fluid ounces" would be removed and replaced with the phrase "60 ml (2 fluid ounces)"; and the phrase "3 fluid ounces" would be removed and replaced with the phrase "90 ml (3 fluid ounces)".

## § 177.856 [Amended]

129. In § 177.856, the following changes would be made:

a. In the section heading and paragraph (d), the phrase "flammable liquids" would be removed and replaced with the phrase "Class 3 (flammable liquid) materials".

b. In paragraphs (a), (b), and (d), the phrase "flammable liquid" would be removed and replaced with the phrase "Class 3 (flammable liquid) material".

## § 177.857 [Amended]

130. In § 177.857, the following changes would be made:

a. In the section heading and paragraph (b), the phrase "flammable solids and oxidizing materials" would be removed and replaced with the phrase "Class 4 (flammable solid) and Class 5 (oxidizing) materials".

b. In paragraphs (a) and (c), the phrase "flammable solid and oxidizing material" would be removed and replaced with the phrase "Class 4 (flammable solid) and Class 5 (oxidizing) material".

## § 177.858 (Amended)

131. In § 177.858, the following changes would be made:

a. In the section heading and paragraph (a), the phrase "corrosive materials" would be removed and replaced with the phrase "Class 8 (corrosive) materials".

b. In paragraphs (a) and (b)(2), the phrase "corrosive liquid" would be removed and replaced with the phrase "Class 8 (corrosive) material".

c. In paragraph (b) introductory text, the phrase "corrosive liquids" would be removed and replaced with the phrase "Class 8 (corrosive) materials".

## § 177.859 [Amended]

132. In § 177.859, the following changes would be made:

a. In the section heading, the phrase "compressed gases" would be removed and replaced with the phrase "Class 2 (gases) materials".

b. In paragraph (a), the phrase "compressed gas" would be removed and replaced with the phrase "Class 2 (gases) material".

c. In paragraph (b), the phrase "flammable gas" would be removed and replaced with the phrase "Division 2.1 (flammable gas) material".

d. In paragraph (b), the phrase "flammable compressed gas" would be removed and replaced with the phrase "Division 2.1 (flammable gas) material" each place it appears.

#### § 177.860 [Amended]

133. In § 177.860, the following changes would be made:

a. In the section heading, the word "poisons" would be removed and replaced with the phrase "Division 6.1 (poisonous) or Division 2.3 (poisonous

gas) materials".

b. In paragraph (a) introductory text, the phrase "any poison", would be removed and replaced with the phrase "any Division 6.1 (poisonous) or Division 2.3 (poisonous gas) materials", the phrase "poison, whether flammable or nonflammable" would be removed and replaced with the phrase "Division 6.1 (poisonous) or Division 2.3 (poisonous gas) materials, whether flammable or nonflammable"; and the phrase "poison in powdered form" would be removed and replaced with the phrase "Division 6.1 (poisonous) materials in powdered form".

c. In paragraph (a)(1), the phrase "poison (class A or B)" would be removed and replaced with the phrase "Division 6.1 (poisonous) or Division 2.3 (poisonous gas) materials", and the phrase "such poisons" would be removed and replaced with the phrase "such Division 6.1 (poisonous) or Division 2.3 (poisonous gas) materials".

d. In paragraph (b), the phrase "poison which is also flammable" would be removed and replaced with the phrase "Division 6.1 (poisonous) or Division 2.3 (poisonous gas) materials which are also flammable"; the phrase "flammable liquid" would be removed and replaced with the phase "Class 3 (flammable liquid) material"; the phrase "any poison" would be removed and replaced with the phrase "any Division 6.1

(poisonous) or Division 2.3 (poisonous gas) materials"; the phrase "compressed gas" would be removed and replaced with the phrase "Class 2 (gases) material"; the phrase "flammable liquids and compressed gases" would be removed and replaced with the phrase "Class 3 (flammable liquid) and Class 2 (gases) materials"; and the phrase "the poison" would be removed and replaced with the phrase "the Division 6.1 (poisonous) or Division 2.3 (poisonous gas) materials".

## § 177.861 [Amended]

134. In § 177.861, the following changes would be made:

a. In the section heading, paragraph (a), and Note 2 of paragraph (a), the phrase "radioactive materials" would be removed and replaced with the phrase "Class 7 (radioactive) materials".

b. In Note 1 of paragraph (a), the phrase "radioactive material" would be removed and replaced with the phrase "Class 7 (radioactive) material".

#### § 177.870 [Amended]

135. In § 177.870, the following changes would be made:

a. In paragraph (d), the phrase "100 pounds gross weight" would be removed and replaced with the phrase "45 kg (99.2 pounds) gross weight", and the phrase "Class C explosives" would be removed and replaced with the phrase "Division 1.4 (Class C explosive) materials".

b. In paragraph (e), the phrase "100 pounds" would be removed and replaced with the phrase "45 kg (99.2 pounds)"; the phrase "500 pounds" would be removed and replaced with the phrase "225 kg (496 pounds)"; and the phrase "250 pounds" would be removed and replaced with the phrase "133.4 kg (250 pounds)".

c. In paragraph (c), the word "Explosives" would be removed and replaced with the phrase "Class 1 (explosive) materials".

d. In paragraphs (b), (d), and (e), the word "explosives" would be removed and replaced with the phrase "Class 1 (explosive) materials".

e. In paragraph (c), the word "explosive" would be removed and replaced with the phrase "Class 1

(explosive) material".

f. In paragraph (f), the word "Poisons" would be removed and replaced with the phrase "Division 6.1 (poisonous or irritating) or Division 2.3 (poisonous gas) materials"; the phrase "poison, class A. any tear gas or irritating substance, class C, any less dangerous poison class B, which is a liquid" would be removed and replaced with the phrase

"Division 6.1 (poisonous or irritating) or Division 2.3 (poisonous gas) materials"; the phrase "poison, class B" would be removed and replaced with the phrase "Division 6.1 (poisonous) material"; and the phrase "100 pounds" would be removed and replaced with the phrase "45 kg (99.2 pounds)".

f. In paragraph (g), the phrases
"Radioactive materials" and
"radioactive materials" would be
removed and replaced with the phrase
"Class 7 (radioactive) materials", and
the phrase "radioactive material" would
be removed and replaced with the
phrase "Class 7 (radioactive) materials".

Issued in Washington, DC, on April 19, 1990, under authority delegated in 49 CPR part 106, appendix A.

Alan I. Roberts,

Director, Office of Hazardous Materials Transportation.

[FR Doc. 90-10180 Filed 5-1-90; 8:45 am] BILLING CODE 4918-60-M